



CITY OF CAMBRIDGE, MASSACHUSETTS

PLANNING BOARD

CITY HALL ANNEX, 344 BROADWAY, CAMBRIDGE, MA 02139

SPECIAL PERMIT APPLICATION • COVER SHEET

In accordance with the requirements of the City of Cambridge Zoning Ordinance, the undersigned hereby petitions the Planning Board for one or more Special Permits for the premises indicated below.

Location of Premises: 48-50 Bishop Allen Drive Cambridge, MA 02139

Zoning District: Business B and Central Square Overlay

Applicant Name: Dobia Properties Corp.

Applicant Address: 907 Massachusetts Avenue Cambridge, MA 02139

Contact Information: 617-491-1932

Telephone #	Email Address	Fax #
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List all requested special permit(s) (with reference to zoning section numbers) below. *Note that the Applicant is responsible for seeking all necessary special permits for the project. A special permit cannot be granted if it is not specifically requested in the Application.*

Special Permit pursuant to section 6.36 Reduction in Required Parking;
 Special permit pursuant to Ordinance section 10.43 Generally applicable Special Permit criteria.
 Special Permit pursuant to section 20.304.4(1)&(2) Waiver of Setback and Open Space;
 Special Permit pursuant to section 20.304.2(2) Additional Height greater than 55' but less than 80'
 Special Permit pursuant to section 20.305 Standards for Issuance of Special Permits;

List all submitted materials (include document titles and volume numbers where applicable) below.

Cover Sheet, Certifications of Receipt of Plans, Ownership Certificate, Fee Schedule, Site Plan/Survey, Existing and Proposed Elevations, Dimensional Table, Site/Context Photos, Shadow Studies, Early Engagement Summary, Traffic and Parking Assessment, LEED Narrative and Report.

Signature of Applicant: 

For the Planning Board, this application has been received by the Community Development Department (CDD) on the date specified below:

Date	Signature of CDD Staff	
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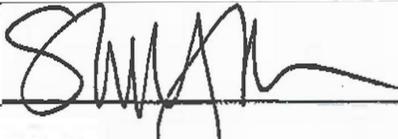
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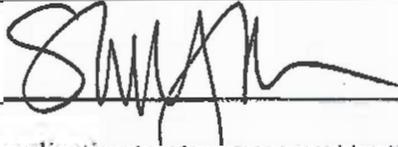
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Signature of Applicant: 

For the Planning Board, this application has been received by the Community Development Department (CDD) on the date specified below:

Date	Signature of CDD Staff	
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OWNERSHIP CERTIFICATE

Project Address: 48-50 Bishop Allen Drive

Application Date: February 18, 2022

This form is to be completed by the property owner, signed, and submitted with the Special Permit Application:

I hereby authorize the following Applicant: Dobia Properties Corp. c/o Stuart Rothman

at the following address: 907 Massachusetts Avenue

to apply for a special permit for: Planning Board Special Permit

on premises located at: 48-50 Bishop Allen Drive Cambridge, MA 02139

for which the record title stands in the name of: Dobia Properties Corp.

whose address is: 907 Massachusetts Avenue

by a deed duly recorded in the:

Registry of Deeds of County: _____

Book: _____

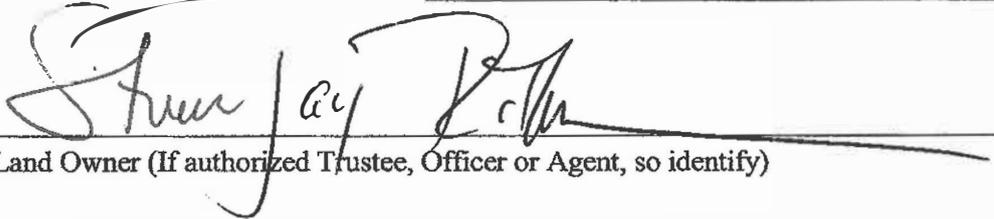
Page: _____

OR Registry District of the Land Court,

Certificate No. : _____

Book: _____

Page: _____



Signature of Land Owner (If authorized Trustee, Officer or Agent, so identify)

To be completed by Notary Public:

Commonwealth of Massachusetts, County of Middlesex South

The above named Stuart Rothman personally appeared before me,

on the month, day and year _____

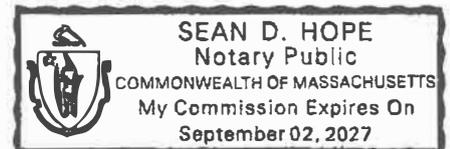
and made oath that the above statement is true.

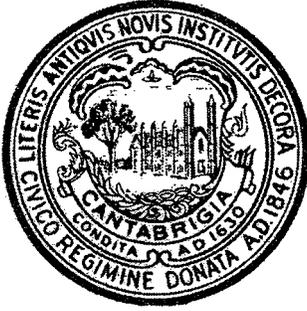
Notary: _____



My Commission expires: _____

~~August 28,~~ September 02, 2027





CITY OF CAMBRIDGE, MASSACHUSETTS

PLANNING BOARD

CITY HALL ANNEX, 344 BROADWAY, CAMBRIDGE, MA 02139

CERTIFICATION OF RECEIPT OF PLANS BY CITY OF CAMBRIDGE TRAFFIC, PARKING & TRANSPORTATION

City Department/Office:

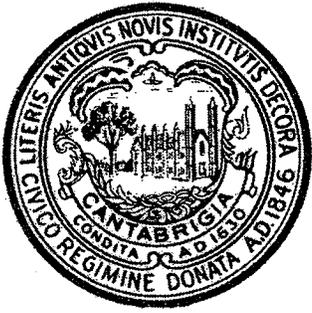
Project Address:

Applicant Name:

For the purpose of fulfilling the requirements of Section 19.20 and/or 6.35.1 and/or 5.28.2 of the Cambridge Zoning Ordinance, this is to certify that this Department is in receipt of the application documents submitted to the Planning Board for approval of a Project Review Special Permit for the above referenced development project: (a) an application narrative, (b) small format application plans at 11" x 17" or the equivalent and (c) Certified Traffic Study. The Department understands that the receipt of these documents does not obligate it to take any action related thereto.

Signature of City Department/Office Representative

Date



CITY OF CAMBRIDGE, MASSACHUSETTS

PLANNING BOARD

CITY HALL ANNEX, 344 BROADWAY, CAMBRIDGE, MA 02139

CERTIFICATION OF RECEIPT OF PLANS BY CITY OF CAMBRIDGE DEPARTMENT OF PUBLIC WORKS

City Department/Office:

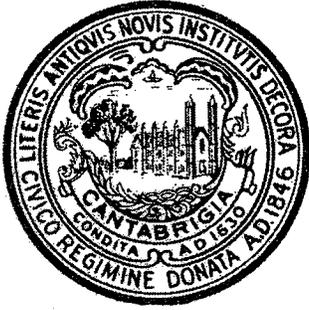
Project Address:

Applicant Name:

For the purpose of fulfilling the requirements of Section 19.20 of the Cambridge Zoning Ordinance, this is to certify that this Department is in receipt of the application documents submitted to the Planning Board for approval of a Project Review Special Permit for the above referenced development project: (a) an application narrative and (b) small format application plans at 11" x 17" or the equivalent. The Department understands that the receipt of these documents does not obligate it to take any action related thereto.

Signature of City Department/Office Representative

Date



CITY OF CAMBRIDGE, MASSACHUSETTS

PLANNING BOARD

CITY HALL ANNEX, 344 BROADWAY, CAMBRIDGE, MA 02139

CERTIFICATION OF RECEIPT OF PLANS BY CITY OF CAMBRIDGE TREE ARBORIST

City Department/Office:

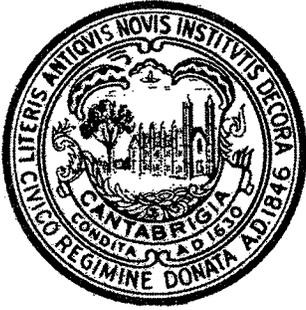
Project Address:

Applicant Name:

For the purpose of fulfilling the requirements of Section 4.26, 19.20 or 11.10 of the Cambridge Zoning Ordinance, this is to certify that this Department is in receipt of the application documents submitted to the Planning Board for approval of a MultiFamily, Project Review or Townhouse Special Permit for the above referenced development project: a Tree Study which shall include (a) Tree Survey, (b) Tree Protection Plan and if applicable, (c) Mitigation Plan, twenty one days before the Special Permit application to Community Development.

Signature of City Department/Office Representative

Date



CITY OF CAMBRIDGE, MASSACHUSETTS

PLANNING BOARD

CITY HALL ANNEX, 344 BROADWAY, CAMBRIDGE, MA 02139

CERTIFICATION OF RECEIPT OF PLANS BY CITY OF CAMBRIDGE WATER DEPARTMENT

City Department/Office:

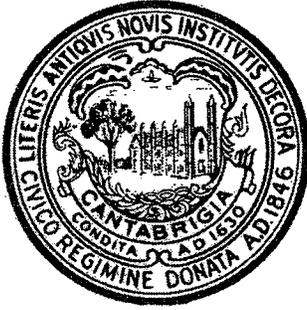
Project Address:

Applicant Name:

For the purpose of fulfilling the requirements of Section 19.20 of the Cambridge Zoning Ordinance, this is to certify that this Department is in receipt of the application documents submitted to the Planning Board for approval of a Project Review Special Permit for the above referenced development project: (a) an application narrative and (b) small format application plans at 11" x 17" or the equivalent. The Department understands that the receipt of these documents does not obligate it to take any action related thereto.

Signature of City Department/Office Representative

Date



CITY OF CAMBRIDGE, MASSACHUSETTS

PLANNING BOARD

CITY HALL ANNEX, 344 BROADWAY, CAMBRIDGE, MA 02139

CERTIFICATION OF RECEIPT OF PLANS BY CITY OF CAMBRIDGE LEED SPECIALIST

City Department/Office:

Project Address:

Applicant Name:

For the purpose of fulfilling the requirements of Section 22.20 of the Cambridge Zoning Ordinance, this is to certify that this Department is in receipt of the application documents submitted to the Planning Board for approval of a Special Permit for the above referenced development project: (a) an application narrative, (b) small format application plans at 11" x 17" or the equivalent and (c) completed LEED Project Checklist for the appropriate LEED building standard, accompanying narrative and affidavit. The Department understands that the receipt of these documents does not obligate it to take any action related thereto.

Signature of City Department/Office Representative

Date

FEE SCHEDULE

Project Address:

Application Date:

The Applicant must provide the full fee (by check or money order) with the Special Permit Application. Depending on the nature of the proposed project and the types of Special Permit being sought, the required fee is the larger of the following amounts:

- If the proposed project includes the creation of new or substantially rehabilitated floor area, or a change of use subject to Section 19.20, the fee is ten cents (\$0.10) per square foot of total proposed Gross Floor Area.
- If a Flood Plain Special Permit is being sought as part of the Application, the fee is one thousand dollars (\$1,000.00), unless the amount determined above is greater.
- In any case, the minimum fee is one hundred fifty dollars (\$150.00).

Fee Calculation

New or Substantially Rehabilitated Gross Floor Area (SF): × \$0.10 =

Flood Plain Special Permit Enter \$1,000.00 if applicable:

Other Special Permit Enter \$150.00 if no other fee is applicable:

TOTAL SPECIAL PERMIT FEE **Enter Larger of the Above Amounts:**

DIMENSIONAL FORM

Project Address: 48-50 Bishop Allen Drive **Application Date:** February 18, 2022

	Existing	Allowed or Required (max/min)	Proposed	Permitted
Lot Area (sq ft)	5150sf	none	5150sf	
Lot Width (ft)	70.8-72.3	50'/none	70.8-72.3	
Total Gross Floor Area (sq ft)	6093 sf	26,780	24,123sf	
Residential Base	6093 sf	20,600	20,600 sf	
Non-Residential Base	N/A	N/A	N/A	
Inclusionary Housing Bonus	N/A	6,180	3,523sf	
Total Floor Area Ratio	.845	6.5	4.68	
Residential Base	.845	4	4	
Non-Residential Base	N/A	N/A	N/A	
Inclusionary Housing Bonus	N/A	30%	.68	
Total Dwelling Units	11	22	22	
Base Units	11	17	17	
Inclusionary Bonus Units	N/A	5	5	
Base Lot Area / Unit (sq ft)	468sf	N/A	302.9sf	
Total Lot Area / Unit (sq ft)	468sf	N/A	234 sf	
Building Height(s) (ft)	36+	80'	69.9'	
Front Yard Setback (Bishop Allen Drive) (ft)	8'	5'	5'	
Front Yard Setback (Douglass Street) (ft)	Varies 4.6'-6.7'+/-	11.29' (or waiver)	5'	
Side Yard Setback – Left (ft)	2.7'	21.9' (or waiver)	5'	
Side Yard Setback – Right (ft)	Varies: 13.2' – 16'	21.75' (or waiver)	Varies: 5.4 – 8.2'	
Open Space (% of Lot Area)	19%	10%	36%	
Private Open Space	15%	10%	0%	
Permeable Open Space	27%	N/a	24%	
Other Open Space (Specify)	N/A	N/A	36% (1,858 S.F.) Patios & Balconies	
Off-Street Parking Spaces	0	11	0	
Bicycle Parking Spaces	0	Long Term: 23 Short Term:3	24 Long Term 4 Short Term	
Loading Bays	0	0	0	

Use space below and/or attached pages for additional notes:

DIMENSIONAL FORM

Building height is compliant with 20.304.2.2.a, which allows up to 80' with a 45 degree bulk control plane at 60':

20.304.2: Building Height Limitations. The maximum height of buildings in the Central Square Overlay District shall be governed by the requirements of this Section 20.304.2; however, at locations where the base zoning district establishes a more restrictive height limitation, the more restrictive shall apply.

1.As of Right Height Limitations. ...

2.Special Permit for Additional Height. Additional height may be permitted as follows:

(a) The maximum allowable height in the Central Square Overlay District may be increased up to eighty (80) feet upon issuance of a Special Permit by the Planning Board provided that those portions in excess of sixty (60) feet are set back from the street line at least ten (10) feet and that those portions are also set back from one or more forty-five degree (45°) bulk control planes beginning sixty (60) feet above any streetline in the district and rising over one or more lots at a forty-five degree (45°) angle...

Project Narrative

February 2022

A. Narrative

The Applicant proposes to construct a multifamily residential development sited on a 5,150 square foot lot at the corner of 50 Bishop Allen Drive and Douglas Street (the “Site”). The Site is located one block east of the bustling Massachusetts Avenue corridor in Central Square with numerous ground floor retail shops, restaurants and several modes of public transit and located within the Central Square and Mass and Main Overlay Districts with a base district of Business B. The proposal is requesting special permit approvals as required by the Zoning Ordinance (the “Ordinance”) for the Central Square Overlay and Business B base zoning district.

The Site is currently improved by a physically obsolete four-story multi-family rental building which covers a majority of the lot with little green space. Directly adjacent to the Site is municipal parking lot number 5 that is currently under construction to support the City of Cambridge’s Storm Water management system and associated Generator which is located directly on property line facing Bishop Allen Drive.

The Applicant proposes to demolish the existing building and construct twenty-two (22) residential dwelling units on Six (6) stories with dwelling units, lobby, elevator, mechanical and bicycle storage on the ground floor. Due to the constraints of the site which make a curb cut impracticable, metered parking on Bishop Allen Drive and the several public transit options, no vehicle parking is proposed for the development. There will be twenty-three (23) indoor bicycle parking spaces on the ground floor and 4 exterior short-term bicycle spaces to service the building. In support of its request to waive the parking requirement the Applicant has retained Vanasse & Associates inc. to complete a parking availability study (a copy of which is included herewith).

The Project will provide a variety of unit types: approximately 9.5% will be one bedrooms (2 units), 81% will be two bedrooms (18 units), and 9.5% will be three bedrooms (2 units).

The primary entrance for the residential units will be located on Bishop Allen Drive near the corner of Douglas Street and Bishop Allen Drive. Along the Bishop Allen and Douglas Street facades the building will be set, back approximately five (5) feet and will include green areas, landscaping and four short-term bicycle parking.

Zoning Approvals and Requested Waivers:

The Applicant is requesting the following approvals pursuant to the Ordinance in connection with the project.

- Special Permit pursuant to section 6.36 Reduction in Required Parking;
- Special permit pursuant to Ordinance section 10.43 Generally applicable Special Permit criteria.
- Special Permit pursuant to section 20.304.4(1) & (2) Waiver of Setback and Open Space;
- Special Permit pursuant to section 20.304.2(2) Additional Height greater than 55' but less than 80'
- Special Permit pursuant to section 20.305 Standards for Issuance of Special Permits
-

Zoning Requirements for Granting Requested Relief

The provisions of the Ordinance set forth below apply to the requested Special Permits for the project. Application of each provision of the Project follows the provision in italics.

A. 6.35 Reduction in Required Parking

6.35.31

The purpose of a Parking Analysis is to provide quantitative data to assist a special permit granting authority in considering certain projects. A Parking Analysis shall be submitted where it is specifically required by any provision of this Zoning Ordinance. A special permit granting authority may also request that elements of a Parking Analysis be provided when considering a project that proposes a deviation from parking requirements specified in the Zoning Ordinance or an increase in development density above the maximum allowed as-of-right under base zoning regulations. The Applicant is seeking relief pursuant to section 6.35 of the Ordinance and not pursuant to the Waiver of Parking and Loading contained in section 20.304.6. Although the Site falls within the Central Square Overlay it also borders the lower mixed use zoning district (Business A) zoning district and therefore the criteria in section 6.35 is more appropriate. The waiver of parking and loading in Central Square Overlay includes criteria that is appropriate for much large projects including but not limited to programming, events, and infrastructure that contribute to the Cultural District established in Central Square and improvements to public parks, or restoration of historic structures, monuments and other features owned by the City of Cambridge or other public agency or a nonprofit organization. As listed below section 6.35 has criteria focus on impact on available parking, proximity to transit and measure to reduce demand for private automobiles.

6.35.32

Where a Parking Analysis is specifically required by any provision of this Zoning Ordinance, the proponent shall first consult with the Traffic, Parking and Transportation Department to determine the scope and methodology of such an analysis. The results of the Parking Analysis shall be included in any Special Permit Application for the project.

Initial discussions with the Traffic, Parking, and Transportation (TP&T) department were held prior to the development of the September 2020 memorandum as well as supplemental discussions with TP&T in March 2021 prior to the preparation of the April 8, 2021 update.

6.35.33

For residential projects, a Parking Analysis shall include some or all of the following, with the specific type and level of analysis to be determined by the Traffic, Parking and Transportation Department based on the relevant characteristics of the proposal:

See parking and traffic assessment by Vanasse & Associates, Inc. (VAI) included hereto.

(a) Estimates of the project's parking demand, as evidenced by vehicle ownership rates and peak parking occupancy data for comparable nearby residential projects, resident parking permit and motor vehicle registration data for the area, and/or other indicators of parking demand. These estimates should account for daytime and nighttime parking. Estimates may account for differences in parking demand given the occupancy of units, such as owner-occupied vs. rental units, market-rate vs. below-market-rate units, or elderly-oriented vs. conventional units. Estimates may also account for anticipated vacancy rates.

See page 2 paragraph 2 of the PTA. The site is expected to have an auto ownership of approximately 0.5 vehicles per unit. The Census Tract 3531.01 the tract the project is located in shows 43 percent of the residents do not own vehicles. It is anticipated that the proposed site would have a higher percentage of residents that do not own cars compared to the surrounding census tract as no parking is being provided on-site and prospective residents will have incorporated this condition into their decision to live in the building. Therefore, it was assumed that the residents of this development would have 50 percent auto ownership.

(b) Maps showing the distance to alternate transportation options in the area, including MBTA rapid transit stations and bus routes, bike facilities, and car-sharing services.

See Figure 4 of the PTA. This figure shows the distance from the site to alternative transportation resources in the area. The closest MBTA Bus Stop is 0.2 miles or a 4-minute walk. The closest Red Line station is 0.2 miles or a 4-minute walk. The closest BLUEbikes Station is 0.2 miles or a 4-minute walk. The closest car sharing location is 120 feet or a 1-minute walk.

(c) Studies of on-street parking capacity and utilization in the vicinity of the project. Such studies should be conducted at night, and should account for the normal activity hours of other land uses in the area.

(d) Where applicable, inventories and peak occupancy data for nearby off-site parking that will be available to the project's residents or visitors, either on a round-the-clock basis or by way of a shared use arrangement. Private, off-site parking shall only be applicable to the analysis if a long-term leasing arrangement is proposed to be made. Shared parking arrangements should be studied thoroughly to determine the minimum amount of parking required to satisfy the demand from all proposed land uses during any given time period.

See Page 3 Paragraph 1 of the PTA. Municipal Parking Lot 5 and Municipal Parking Lot 6 were not included in the parking utilization observations conducted in December 2019. These lots are metered until 10:00 PM and are available for temporary use until 8:00 AM. Parking Lot 5 is located 0.1 miles or a 2-minute walk northeast of the Project site and contains 82 spaces. Parking Lot 6 is located 250 feet or a 1-minute walk northeast of the Project site and contains 45 spaces. The applicant is also working with the owners of the 55 Franklin Street garage in order to provide parking for residents, should residents come to the site with one or more vehicles in their use.

(e) A description of measures that will be implemented to reduce demand for private automobile use, such as the availability of car-sharing programs and/or incentives for residents or employees to walk, bicycle, or use public transportation, and estimates of the anticipated impact of those measures on parking demand.

See Page 3 Paragraph 1 of the PTA. Municipal Parking Lot 5 and Municipal Parking Lot 6 were not included in the parking utilization observations conducted in December 2019. These lots are metered until 10:00 PM and are available for temporary use until 8:00 AM. Parking Lot 5 is located 0.1 miles or a 2-minute walk northeast of the Project site and contains 82 spaces. Parking Lot 6 is located 250 feet or a 1-minute walk northeast of the Project site and contains 45 spaces. The applicant is also working with the owners of the 55 Franklin Street garage in order to provide parking for residents, should residents come to the site with one or more vehicles in their use.

B. Generally Applicable Criteria for Approval of a Special Permit

Pursuant to section 10.43 of the Ordinance, Special Permits will normally be granted where provisions of this Ordinance are met, except when particulars of the location or use, not generally true of the district or of the uses permitted in it, would cause granting of such permit to be to the detriment of the public good because:

- a) It appears that requirements of this Ordinance cannot or will not be met

With the requested Special Permits, the Project will meet all requirements of the Ordinance.

- b) Traffic generated and or patterns of access or egress would cause congestion, hazard or substantial change in established neighborhood character.

This Project is located in the Central Square Overlay and Business B Zoning District and is currently improved by a multifamily residential building on a corner lot. Although the projects size doesn't require a Transportation Impact Study the site is well served by public transportation with a several transit options in close proximity to the Dispensary. (See attach Traffic Impact Memo).

- c) The continued operation of or the development of adjacent uses as permitted in the Zoning Ordinance would be adversely affected by the nature of the proposed use or

The Project will not adversely affect continued operation or future development of adjacent uses and will further the mixed-use character of the Central Square Overlay because the overlay allows for densities and heights similar to current proposal. Additionally, the Overlay dimensional standards provides that the upper portions of buildings to be set back from Bishop Allen drive creating a natural transition from the lower scaled residential neighborhoods east of Central Square in the Port neighborhood. Similarly, the site's lack of parking will not adversely impact development of adjacent uses because there are many modes of transit, zipcar, municipal parking lot 5 and metered parking. Additionally, the parking requirement in the overlay was reduced in a recent amendment from one parking space per dwelling unit to .25 parking spaces per dwelling unit in part to encourage residents and occupants that rely less on private vehicles. This housing proposal is consistent with smart growth principles and provides much need housing the emerging mixed use district.

- d) Nuisance or hazard would be created to the detriment of the health, safety and/or welfare of the occupant of the proposed use or the Citizens of the City or

The Project will not create any nuisance or hazard to the detriment of the health, safety and or welfare of the occupants of the Project nor the citizens of the City. Once

complete the project will add much needed housing in Central Square including three (3) bedroom units which are rare and are particularly suitable for families.

This Project is consistent with goals and objectives of the recently adopted (2017) Central Square Restoration Petition and Cambridge's goals of health, safety and welfare as set forth in Section 19.30 (Citywide Urban Design Objectives) of the Ordinance to foster development which is responsive to the existing or anticipated patterns of development.

- e) For other reasons, the proposed use would impair the integrity of the district or adjoining district, or otherwise derogate from the intent and purpose of this Ordinance and

The Project will not impair the integrity of the district in which it is located or the adjoining district nor derogate from the intent and purpose of the Ordinance as the proposed multi-family residential use is allowed in this district and the project requires no additional relief beside the requested Special Permits. When complete, the Project will add high quality family friendly housing to the emerging mixed-use district consistent with sustainable building practices and twenty percent (20%) of the building gross floor area being restricted for affordable housing.

Further, this project will revitalize a dilapidated property into a thriving residential development that is consistent with the stated purpose of the zoning ordinance (section 1.30) which includes encouraging the most rational use of land throughout the city.

C. 19.30 Citywide Urban Design Objectives

1. Pursuant to Section 19.31 of the Ordinance, new projects should be responsive to the existing or anticipated pattern of development. Indicators include:

- a) Heights and setbacks provide suitable transition to abutting or nearby residential zoning districts that are generally developed to low scale residential uses.

The proposed building height is below the maximum allowed by Special Permit within the Overlay district and continues the pattern of varying heights and densities along Bishop Allen Drive and Douglas. The project has similar heights and densities to other new developments in the Square including 10 Essex Street and 5 Columbia Street and lowered scaled building of the abutting Mass and Main. The building height (69'-11") and design will incorporate the required step-back for the upper story to comply with the forty-five (45) degree bulk control plane from the lower scaled Bishop Allen Drive and residential neighborhood to the east. Lastly, the mechanicals required for the dwelling units will be designed to satisfy Cambridge's Noise Control Ordinance (Chapter 8.16) and be positioned to be visible from the public way to the greatest extent possible and screened per the requirements set forth in the zoning code. The screening shall be consistent with the aesthetic of the proposed structure.

b) New buildings are designed and oriented on the lot so as to be consistent with the established streetscape on those streets on which the project lot abuts. Streetscape is meant to refer to the pattern of building setbacks and heights in relationship to public streets.

The proposed development is setback from the street 5' on portions of the building facing Bishop Allen Drive and Douglas Street which is consistent with the pattern of development on the adjacent streets. The proposed height is consistent with the newly constructed residential buildings on Bishop Allen Drive that furthers the evolution of the Central Square into a mixed-used district where people can live, work and play. As intended by the Zoning Code, this structure will act as a stepping stone between the mixed-use high-rise development on Massachusetts Avenue and the less dense residential neighborhood opposite of Bishop Allen Drive

c) In mixed-use projects, uses are to be located carefully to respect context, e.g. retail should front onto a street, new housing should relate to any adjacent existing residential use etc.

The project is 100% residential and will not provide any commercial or non-residential space.

d) Where relevant, historical context are respected e.g. special consideration should be given to buildings or buildings that are preferably preserved on adjacent to the Site.

There are no known neighboring historic buildings that are preferably preserved on or adjacent to the site. In November 2019 the Cambridge Historical Commission approved demolition of the existing structure after review of the proposed redevelopment.

2. Pursuant to Section 19.32 of the Ordinance, development should be pedestrian and bicycle-friendly, with a positive relationship to its surrounding. Indicators include (a) Ground floors, particularly where they face public streets, public parks, and publicly accessible pathways, consist of spaces that are actively inhabited by people, such as retail stores, consumer services businesses and restaurants where they are allowed, or general office, educational or residential uses and building lobbies. Windows and doors that normally serve such inhabited spaces are encouraged to be prominent aspect of the relevant building facades. Where a mix of activities are accommodated in the building, the more active uses are encouraged facing public street, parks and pathways.

The ground floor will contain uses associated with a residential multifamily development including a lobby, mechanical room, elevator access and bicycle parking (sheltered and unsheltered) with the number of spaces satisfying the Ordinance requirement for bicycle parking.

In commercial districts, such active space consists of retail and consumer service stores and building lobbies that are oriented towards the street and encourage pedestrian activity

on the sidewalk. However, in all cases such ground floor spaces should be occupied by uses (a) permitted in the zoning district within which the structure is located, and (c) compatible with the principal use for which the building is designed.

Not Applicable

(b) Covered parking on the lower floors of a building and on-grade open parking, particularly where located in front of a building, is discouraged where a building faces a public street or public park and publicly accessible pathways.

Due to the constraints of the site, metered parking on Bishop Allen and multiple modes of public transit there is no parking being proposed on site.

(c) Ground floors should be generally 25-50% transparent. The greatest amount of glass would be expected for retail uses with lesser amount for office, institutional or residential use.

The ground floor levels have been designed to maximize glazing where possible. The corner of Douglas Street & Bishop Allen Drive contains the residential lobby and bike storage. This portion of the structure has storefront style glazing. The left side (from Bishop Allen Drive) contains a transformer vault that complies with the parameters provided by Eversource & is not glazed for safety concerns. The portion of the ground floor along the right side (from Douglas Street) is occupied by residential units & is glazed to be consistent with the rhythm of the residential glazing on the upper floors. The façade that fronts Douglas Street and the façade that fronts Bishop Allen Drive both have 28% glazing.

(d) Entries to buildings are located so as to ensure safe pedestrian movement across street, encourage walking as preferred mode of travel within the city and to encourage the use of public transit for employment and other trips. Relating building entries as directly as possible to crosswalks and to pathways that lead to bus stop and transit stations is encouraged; siting buildings on a lot and developing site plans that reinforce expected pedestrian pathways over the lot and through the district is also encouraged.

The building has been sited to encourage pedestrian access by providing ADA accessible access to the residential lobby, which is at the corner of Bishop Allen Drive and Douglas Streets. This entry location provides the most convenient point of intersection between pedestrian traffic from Bishop Allen Drive and Massachusetts Avenue via Douglas Street.

(e) Pedestrians and bicyclists are able to access the site safely and conveniently; bicyclists should have, secure storage facilities conveniently located on-site and out of the weather. If bicycle parking is provided in a garage, special attention must be paid to providing safe access to the facilities from the outside.

Pedestrians and bicyclists can access the site safely on ADA-compliant paths and sidewalks along the streets and within the site. Secured, covered bicycle parking is

provided in the lobby of the building. Additionally, short-term bicycle space are provided in the front of the building.

(f) Alternate means of serving this policy objective 19.32 through special building design, siting, or site design can be anticipated where the building form or use is distinctive such as freestanding parking structures, large institutional buildings such as churches and auditoriums, freestanding service buildings, power plants, athletic facilities, manufacturing plants, etc.

The Project complies with the policy objective 19.32.

3) Pursuant to Section 19.33 of the Ordinance, the building and site design should mitigate adverse environmental impacts of the development upon its neighbors. Indicators include:

a) Mechanical equipment that is carefully designed, well organized or visually screened from its surroundings and is acoustically buffered from neighbors. Consideration is given to the size, complexity and appearance of the equipment, its proximity to residential areas, and its impact on the existing streetscape and skyline. The extent to which screening can bring order, lessen negative impacts and enhance the overall appearance of the equipment should be taken into account.

Rooftop mechanicals will be designed to minimize sight from the public way to the greatest extent possible. They shall be screened in a manner that is complementary to the proposed aesthetic of the structure. In order to minimize construction impact and to avoid potential water table issues, this development does not include a basement. Therefore, the mechanical equipment will be located between the ground floor and the rooftop.

b) Trash that is handled to avoid impacts (noise, odor, and visual quality) on neighbors e.g. the use of trash compactors or containment of all trash storage and handling within a building is encouraged.

The trash/recycling storage and handling for the Project is contained within the building to avoid noise, odor and visual impacts to the furthest extent possible. The trash will be picked up by a private trash company at a frequency determined by the building needs. In compliance with the Ordinance, no refuse storage areas are located in the front yards.

c) Loading Docks that are located and designed to minimize impacts (visual and operational) on neighbors.

Not Applicable.

d) Stormwater Best Management Practices and other measures to minimize runoff and improve water quality are implemented.

The project will implement Best Practices to minimize runoff and improve water quality.

e) Landscaped areas and required Green Area Open Space, in addition to serving as visual amenities, are employed to reduce the rate and volume of storm water runoff compared pre-development conditions.

The Project has incorporated Low Impact Development Design features into overall Stormwater Management design of the site including an increase permeable surfaces and natural landscape features and grading.

f) The structure is designed and sited to minimize shadow impacts on neighboring lots, especially shadows that would have a significant impact on the use and enjoyment of adjacent open space and shadows that might impact the operation of a Registered Solar System as defined in Section 22.60 of the Ordinance.

The proposed development minimizes shadows to the greatest extent possible. The morning shadows are cast on Douglas Street. During the day, the shadows wrap around the Douglas Street, Bishop Allen Drive intersection & terminate at Bishop Allen drive, opposite of the City parking lot. There are no adjacent open spaces that will be negatively affected by shadows from this development. Evening shadows will be cast onto the corner of the adjacent city parking lot & afternoon shadows will be cast onto the private parking lot opposite of Bishop Allen Drive towards the winter solstice.

g) Changes to the grade across the lot are designed in ways to minimize the need for structural retaining walls close to the property line.

The project will maintain existing grade in general, making small adjustment to enhance drainage and ground coverage.

h) Building Scale and wall treatment, including the provision of windows, are sensitive to existing residential uses on adjacent lots.

The proposed structure has been designed to visually break up the scale of the massing in order to relate to the surrounding, less dense structures as well as the larger scale developments. This is accomplished by providing a distinct 1 to 1.5 story “base” of a higher quality veneer material, 5 story “middle” of cementitious cladding, and 1 story “cap” of cementitious or metal cladding. The Bishop Allen and right side (from Douglas Street) facades are broken up by a series of consistently spaced window bays. The Douglas Street and left side (from Bishop Allen) facades are broken up by a series of

balconies that protrude into the setbacks. All of these elements help to reduce the apparent scale of the structure.

i) Outdoor lighting is designed to provide minimum lighting necessary to ensure adequate safety, night vision and comfort, while minimizing light pollution.

Architectural lighting will be designed to shield lamps from view and minimize light pollution. Pedestrian lighting along the fronts (Bishop Allen and Douglas) and side yard areas will provide safe lighting to supplement existing street lighting while enhancing the visual landscape in the evenings. Additionally all lighting will be low emittance LED type fixtures with excellent light control to avoid light spillage on abutting properties.

j) The creation of Tree Protection Plan that identifies important trees on the site, encourages their protection, or provides for adequate replacement of trees lost to development on the site.

The site is mostly covered with the existing structure and walkways containing one tree. As depicted on the landscaped plan, new landscaping including bushes and tree species are being proposed that will provide shade and greening of the site.

4) Pursuant to Section 19.34 of the Ordinance, projects should not overburden the City infrastructure services, including roads, city water supply system and sewer system.

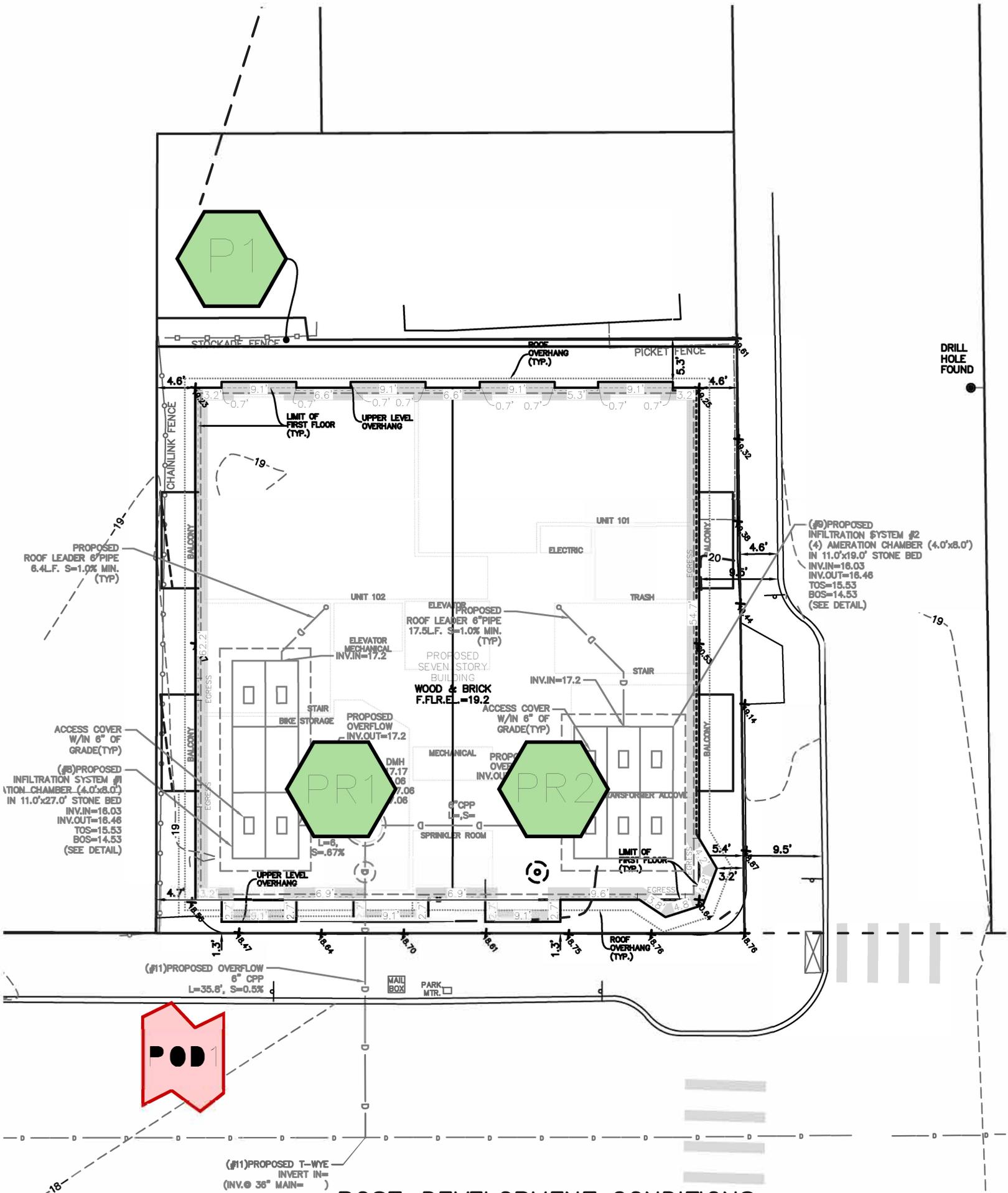
a) The building and site design are designed to make use of water-conserving plumbing and minimize the amount of stormwater run-off through the use of best management practices for stormwater management.

As described above, the Project's stormwater management system has been designed to incorporate best management practices and a preliminary plan has been submitted to DPW the Department of Public Works. Water-conserving plumbing fixtures will be used in keeping with industry standards, and as required to meet LEED standards where applicable.

b) The capacity and condition of drinking water and wastewater infrastructure systems are shown to be adequate, or the steps necessary to bring them up to an acceptable level are identified.

Sanitary Sewer Service Infrastructure

As described above, the proposed project is solely for residential use and its sewer infrastructure is designed to treat sanitary wastewater only, per the Department of Environmental Protection 310CMR the design rate of 110 gallons per bedroom per day is used. The existing sanitary sewer line located at 44 ½ & 50 Bishop Allen Drive will be cut and capped and replaced with a new design. The proposed design will connect into the existing 15" Ductile Iron public sewer main on the southwest side of Bishop Allen Drive, between Douglas and Columbia Street. The relative design flows are as follows:



POST-DEVELOPMENT CONDITIONS

(FIGURE 2)

for the existing residential multi-family structure, there are twelve bedrooms. The design rate of 110 gallons per bedroom per day, equals an existing design flow of one-thousand, three-hundred and twenty gallons per day. The proposed building has a combination of one two- and three-bedroom units; totaling forty-four bedrooms. The design rate used of 110 gallons per bedroom per day, equals a design flow of, four-thousand-eight hundred-forty gallons per day. This has a net into the city of Cambridge sewer system of three-thousand, five-hundred and twenty gallons per day. The proposed connection will seek all applicable permits with the Cambridge Department of Engineering, Cambridge Department of Public Works and MWRA.

Water Service – Domestic and Fire

As described above, the project is comprised of twenty-two residential units and will require two water line services into the proposed building. Both lines will connect into South-west side of the 8inch ductile iron water main on Bishop Allen Drive, between Douglas Street and Columbia Street. A two-inch line to service all domestic residential usages and a two-inch line to service the fire suppression systems. The proposed connections will seek all applicable permits with the Cambridge Department of Engineering, Cambridge Department of Public Works and MWRA.

c) Buildings are designed to use natural resources and energy resources efficiently in construction, maintenance, and long-term operation of the building, including supporting mechanical systems that reduce the need for mechanical equipment generally and its location on the roof of a building specifically. The buildings are sited on the lot to allow construction of adjacent lot to do the same. Compliance with the Leadership Energy and Environmental Design (LEED) certification standards and other evolving environmental efficiency standards are encouraged.

LEED Narrative:

See LEED certification and Narrative submitted with this application. Further the project is not subject to the Green Building requirements of Article 22.000 of the ordinance as the total building square footage is less than 25,000 square feet.

5) Pursuant to Section 19.35 of the Ordinance, new construction should reinforce and enhance the complex urban aspects of Cambridge as it has developed historically. Indicators include

a) New Educational institutional construction that is focused with the existing campuses.

N/A to the Project.

b) Where institutional construction occurs in commercial areas, retail, consumer service enterprises, and other uses that are accessible to the general public are provided at the

ground (or lower) floors of buildings. Where such uses are not suitable for programmatic reasons, institutional uses that encourage active pedestrian traffic to and from the site.

N/A to the Project

c) In large, multiple-building, non-institutional developments, a mix of uses, including publicly accessible retail activity, is provided where such uses are permitted and where the mix of uses extends the period of time the area remains active throughout the day.

N/A to the Project

d) Historic structures and environments are preserved.

N/A to the Project

e) Preservation or provision of facilities for start-up companies and appropriately scaled manufacturing activities that provide a wide diversity of employment paths for Cambridge residents as a component of the development; however, activities heavily dependent on trucking for supply and distribution are not encouraged.

N/A to the Project

6) Pursuant to Section 19.36 of the Ordinance, expansion of the inventory of housing in the City is encouraged. Indicators include

a) Housing is a component of any large, multiple building commercial development. Where such development abuts residential zoning districts substantially developed to low-scale residential uses, placement of housing within the development such that it acts as a transition/buffer between uses within and without the development.

b) Where housing is constructed, providing affordable units exceeding that mandated by the Ordinance. Targeting larger family-sized middle income units is encouraged.

The Project is a residential development adding twenty-two (22) residential dwelling units to the housing inventory of the City. A range of unit types are provided, of which 9.5% will be one bedrooms, 81% will be two bedrooms, and 9.5% will be three bedrooms. The Project will provide 20% of the building floor area of) set aside for affordable housing..

7) Pursuant to Section 19.37 of the Ordinance, enhancement and expansion of open space amenities in the city should be incorporated into new development in the city. Indicators include:

a) On large-parcel commercial development, publicly beneficial open space is provided.

N/A to the Project

b) Open space facilities are designed to enhance or expand existing facilities or to expand networks of pedestrian and bicycle movement within the vicinity of the development.

Due to the constraints of the lot there are no open space facilities onsite although there are parks and open space facilities within a short walk from the site including Clement Morgan Park, Lafayette Square and hosts of pocket parks within 1/2 of the site.

c) A wider range of open space activities than presently found abutting area is provided.

The project is in close proximity to several open space amenities including Clement Morgan Park, Lafayette Square and hosts of pocket parks within 1/2 of the site.

20.305 Standards for Issuance of Special Permits.

In addition to the general standards for the issuance of a special permit found in Section 10.40 of the Zoning Ordinance, the special permit granting authority shall in addition make the following findings:

- The proposed development is consistent with the goals and objectives of the Central Square Action Plan:
- Encourage responsible and orderly development;
- Strengthen the retail base to more completely serve the needs of the neighborhoods;
- Preserve the Square's cultural diversity;
- Create active people oriented spaces;
- Improve the physical, and visual environment;
- Provide retail establishments that serve people of diverse economic and social groups who live in the surrounding neighborhoods;
- Encourage the development of new mixed income housing; and
- Promote compatible retail adjacent to residential uses.
- The building and site designs are consistent with "Urban Design Plan for Central Square" as outlined in the "Central Square Action Plan" and the "Central Square Development Guidelines";
- The building and site designs adequately screen the parking provided and are sensitive to the contributing buildings in the vicinity.
- No National Register or contributing building is demolished or so altered as to terminate or preclude its designation as a National Register or contributing building; and
- No National Register or contributing building has been demolished or altered so as to terminate or preclude its designation within the five (5) years preceding the application.

The requested special permit to allow for heights greater than 55' and for a Waiver of Setbacks and Open space as required and permitted pursuant to sections 20.304.2 and 20.304.4 are consistent with the goals and objectives of the Central Square Action Plan and Guidelines as follows.

The proposed development seeks to redevelopment an underused and dilapidated multifamily market rate dwelling into a mixed income building including approximately 3,523 Sf devoted to exclusively affordable housing. This development will support diversifying the future residents of Central Square with new mixed-income housing option.

Further the development benefits from and relies on the various multiple modes of public transit in close proximity on Mass Ave and therefore proposes zero onsite parking. The lack of onsite parking preserves the uninterrupted sidewalk experience without curb cuts thereby maintaining pedestrian safety consistent with the Central Square Action Plan.

The building has been designed to shift the greater heights and Massing towards the Business B portion along Massachusetts Avenue and away from the lowered scaled Business A district on Bishop Allen. Additionally, the upper floor is stepped back from the perimeter of the building such that the additional height is set back behind a 45' bulk control plane beginning at an elevation of forty-five (45) feet above the front lot lines on Bishop Allen drive. The result is that the upper floor is appropriately screened from passerby on Bishop. Lastly, the building exterior is consistent with recommendation contained in the Central Square Design Guidelines for housing developments in the overlay including creation of affordable units, window should overlook the street below, units should face adjacent residential units on Bishop Allen and be sensitive to the scale of adjacent units.

IV. CONCLUSION

As described above, the Project is appropriate for the site and surroundings providing additional housing near transit, amenities and services. Accordingly, for the reasons set forth in this application, the Applicant respectfully requests that the Board find that the Project satisfies all applicable requirements of the Ordinance in connection with the granting of the requested Special Permits.

48-50 Bishop Allen Drive

Early Engagement Summary

Early Engagement Summary:

Project Address: 48-50 Bishop Allen Drive

Location of meeting: 580 Mass Ave (ground floor)

Community Meeting #1:

Tuesday December 17, 2020 @ 4pm

- In attendance were approximately 15 people from the community including residential abutters to the project from Douglas Street, residents from Essex Street and the Port. Also representative from the Cambridge Residence Alliance, St. Pauls's AMS and Elks were in attendance.
- Developer made a presentation including
 - o Development plan, site plan, building elevations, perspective and list of zoning relief requested.
 - o Timeline for next steps including the Central Square Advisory Committee.
 - o Owner presented information regarding the existing tenants in the building and confirm that the all were offered relocation packages.
- Questions/Comments from the public
 - o Concerns were expressed about the timing of the meeting time at 4pm instead of later in the evening.
 - o Members of the public asked about a project website to keep up to date on the various developments of the project,
 - o Concerns were expressed about the existing tenants to ensure that agreements were in place so that they wouldn't be displaced unfairly.
 - o Douglas street resident commented that the building was close to his rental unit and would negatively impact his rentals.
 - o Resident of Cambridge (Marilee Myers) stated that the development was incongruous with other building on Bishop Allen near corner of Norfolk.
 - o Resident Nancy Ryan complained about the timing of the meeting and advertisement. Stating that in her opinion the meeting shouldn't count as an early pre-engagement meeting due to the timing of the meeting. She was concerned that others who might want to participate couldn't attend.

Advertisement:

- At least two weeks prior to the meeting a copy of the meeting flier was sent to the area4coalition list serve, members of the Cambridge Residents Alliance and a letter was mailed to all owner on Douglas Street, Institutional Uses on Bishop Allen including St. Paul's AME and Elks Lodge.

48-50 Bishop Allen Drive

Early Engagement Summary

Thursday January 31, 2020

- In attendance were approximately 15 people from the community and the Owner Stuart Rothman was in attendance.
- Developer made a presentation including
 - o Development plan, site plan, building elevations, perspective and list of zoning relief requested.
 - o Timeline for next steps including the Central Square Advisory Committee.
 - o Updated the group that a new project website is available.
<https://50bishopallen.com/project-timeline>
 - o Owner presented general information about the potential rents making assumptions based on construction costs, affordable rents etc.
 - o Owner presented information regarding the existing tenants in the building and confirm that the all were offered relocation packages.
 - o
- Questions/Comments from the public
 - o Height of building and does that adhere to the zoning?
 - o How does the 45' height limit on Bishop Allen and the 45 degree bulk plain impact the building.
 - o Energy efficiency and glass. Lot of glass on the street facing façade and its impact on energy efficiency;
 - o Parking; did/will developer consider limiting the number of parking stickers similar to Mass and Main and 10 Essex.
 - o The proposed building lacks neighborhood context and vocabulary as compared to building at the corner of Norfolk Street and Bishop Allen.
 - o Direct abutter thinks the top floor makes sense and supports the height. Also stated that most of its neighbors had given up their cars and would prefer gardens over parking spaces.
 - o Several questions were asked about construction management, duration of development and process.
 - o Several questions about future rents and its impact on gentrification.

Advertisement:

- At least two weeks prior to the meeting a copy of the meeting flier was sent to the area4coalition list serve, members of the Cambridge Residents Alliance and a letter was mailed to all owner on Douglas Street, Institutional Uses on Bishop Allen including St. Paul's AME and Elks Lodge.

Architectural Drawing List		
Sheet Number	Sheet Name	Sheet Issue Date
A-000	Cover Sheet	02/18/2022
C0	Existing Topographic Site Plan	5/31/2019
C1	Topographic Site Plan	11/24/2021
L1	Tree Study	4/13/2021
L2	Adjacent Developments	4/13/2021
L3	Landscape Site Plan	3/3/2021
A-020	Architectural Site Plan	02/18/2022
A-021	Existing & New Site Plans	12/17/2021
A-023	Bicycle Parking Plan	02/18/2022
A-025	Area Analysis	02/18/2022
A-026	Unit & Common Areas	02/18/2022
A-101	1st Floor Plan	02/18/2022
A-102	2nd Floor Plan	02/18/2022
A-103	3rd Floor Plan	02/18/2022
A-104	4th & 5th Floor Plans	02/18/2022
A-105	6th Floor Plan	02/18/2022
A-106	7th Floor Plan	02/18/2022
A-107	Roof Floor Plan	02/18/2022
A-300	Elevations	02/18/2022
A-301	Street Elevations	02/18/2022
A-302	Side Elevations	02/18/2022
A-320	Bishop Allen Drive Elevation	02/18/2022
AV-1A	Neighborhood Photos	02/18/2022
AV-1D	Neighborhood Photos	02/18/2022
AV-1E	Neighborhood Photos	02/18/2022
AV-1B	Neighborhood Photos	02/18/2022
AV-1C	Neighborhood Photos	02/18/2022
AV-2	Perspectives	02/18/2022
AV-2A	Existing Perspectives	02/18/2022
AV-3	Rendering 1	02/18/2022
AV-3A	Rendering 1 - Existing	02/18/2022
AV-4	Rendering 2	02/18/2022
AV-4A	Rendering 2 - Existing	02/18/2022
AV-5	Rendering 3	02/18/2022
AV-5A	Rendering 3 - Existing	02/18/2022



PROJECT NAME
Bishop Allen @ Douglass

PROJECT ADDRESS
 BISHOP ALLEN DRIVE
 @ DOUGLASS STREET
 CAMBRIDGE, MA

CLIENT
FIRST CAMBRIDGE

ARCHITECT

KHALSA

17 IVALOO STREET SUITE 400
 SOMERVILLE, MA 02143
 TELEPHONE: 617-591-8682

CONSULTANTS:

LANDSCAPE:
VERDANT LANDSCAPE ARCHITECTURE
 318 HARVARD STREET SUITE 25
 BROOKLINE, MA 02446

CIVIL:
VTP ASSOCIATES, INC
 132 ADAMS STREET,
 2ND FLOOR SUITE 3
 NEWTON, MA 02458

PROJECT: BISHOP ALLEN @ DOUGLASS RESIDENCES

PROJECT ADDRESS:
 50 BISHOP ALLEN DRIVE
 CAMBRIDGE, MA

ARCHITECT:
KHALSA DESIGN INC.
 17 IVALOO STREET, SUITE 400
 SOMERVILLE, MA 02143
 617-591-8682

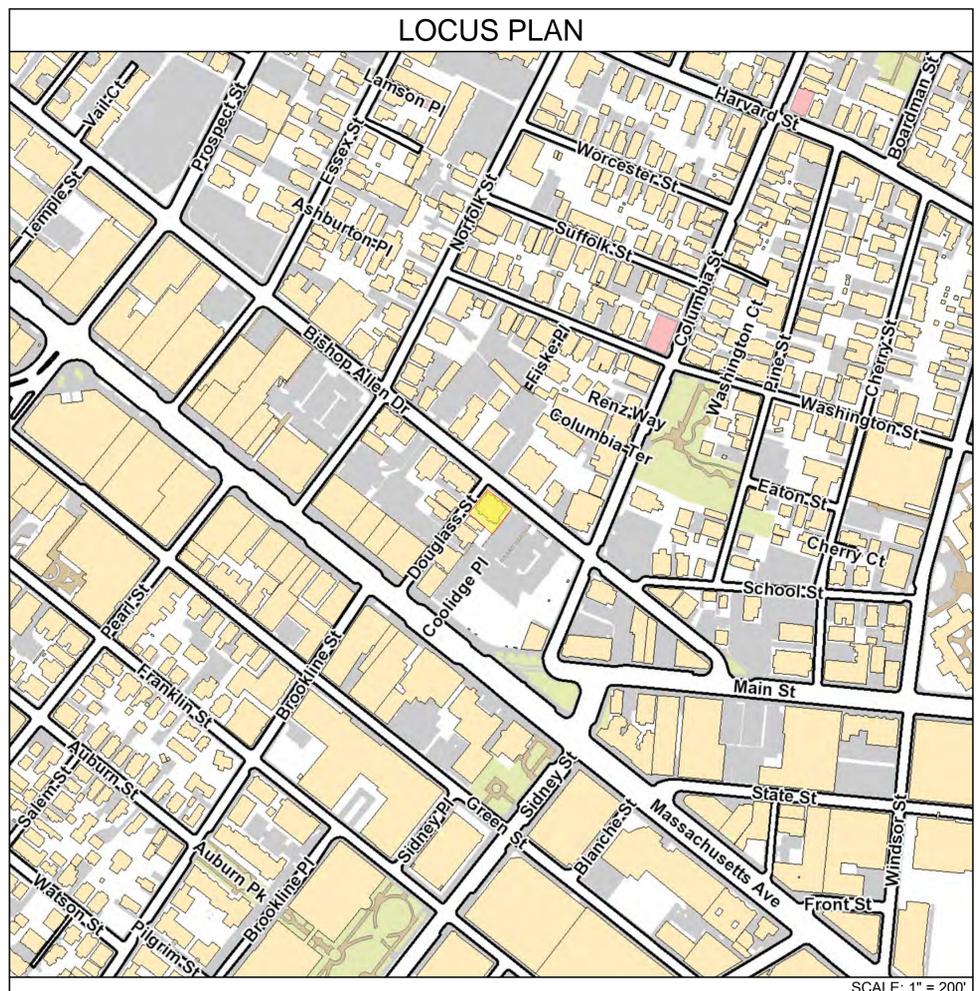
CLIENT:
FIRST CAMBRIDGE REALTY CORP
 907 MASSACHUSETTS AVENUE
 CAMBRIDGE, MA 02139
 T. 617-547-6559

LEGAL:
HOPE LEGAL LAW OFFICES
 907 MASSACHUSETTS AVENUE,
 SUITE 300
 CAMBRIDGE, MA 02139

LANDSCAPE:
VERDANT LANDSCAPE ARCHITECTURE
 318 HARVARD STREET SUITE 25
 BROOKLINE, MA 02446

CIVIL:
VTP ASSOCIATES, INC
 132 ADAMS STREET, 2ND FLOOR SUITE 3
 NEWTON, MA 02458

Special Permit Set
2/18/2022



SCALE: 1" = 200'

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 OF PROSECUTION UNDER LAW



Project number	18132
Date	2/18/2022
Drawn by	ERS
Checked by	JSK
Scale	1" = 200'-0"

REVISIONS		
No.	Description	Date

Cover Sheet

A-000

Bishop Allen @ Douglass

DEED DESCRIPTION 48-50 BISHOP ALLEN DRIVE

A CERTAIN PARCEL OF LAND WITH THE BUILDINGS THEREON SITUATED IN CAMBRIDGE, BEING NOW NUMBERED 44 1/2-50 INCLUSIVE AUSTIN STREET AND BEING SHOWN AS LOT B ON A PLAN ENTITLED "SUBDIVISION OF LAND IN CAMBRIDGE BELONGING TO LUCY A. KAULBACK" DATED DECEMBER 17, 1946, BY DONALD J. REARDON, SURVEYOR, RECORDED BOOK 7080, PAGE 467, BEING BOUNDED AND DESCRIBED AS FOLLOWS:

NORTHEASTERLY: BY SAID AUSTIN STREET, SEVENTY-ONE AND 1/10 (71.35) FEET;
NORTHWESTERLY: BY DOUGLAS STREET, SEVENTY-ONE AND 1/10 (71.99) FEET;
SOUTHWESTERLY: BY LOT A ON SAID PLAN, FIFTY-TWO (52) FEET;
NORTHWESTERLY: AGAIN BY SAID LOT A, TWO AND 1/10 (2.7) FEET;
SOUTHWESTERLY: AGAIN BY LOT A, EIGHTEEN (18) FEET; AND
SOUTHEASTERLY: BY LAND OF OWNERS UNKNOWN, SEVENTY FOUR AND 1/10 (74.67) FEET.
CONTAINING 5150 SQUARE FEET OF LAND.

FOR TITLE SEE DEED OF GEORGE ROTHMAN AND JAMES M. CURRAN DATED DECEMBER 27, 1995 RECORDED WITH MIDDLESEX SOUTH REGISTRY OF DEEDS IN BOOK 16669, PAGE 560.

SURVEYOR'S DESCRIPTION 48-50 BISHOP ALLEN DRIVE

NORTHWESTERLY: BY BISHOP ALLEN DRIVE, SEVENTY-ONE AND 1/10 (71.35) FEET;
SOUTHWESTERLY: BY DOUGLAS STREET, SEVENTY-TWO AND 1/10 (72.26) FEET;
SOUTHEASTERLY: BY LAND NOW OR FORMERLY FULLER AND MCAVINNEY, FIFTY-TWO (52) FEET;
SOUTHEASTERLY: AGAIN BY LAND NOW OR FORMERLY FULLER AND MCAVINNEY, TWO AND 1/10 (2.7) FEET;
SOUTHWESTERLY: AGAIN BY LAND NOW OR FORMERLY FULLER AND MCAVINNEY, EIGHTEEN (18) FEET; AND
NORTHEASTERLY: BY LAND NOW OR FORMERLY CITY OF CAMBRIDGE, SEVENTY FOUR AND 1/10 (74.67) FEET.
CONTAINING 5158 SQUARE FEET OF LAND.

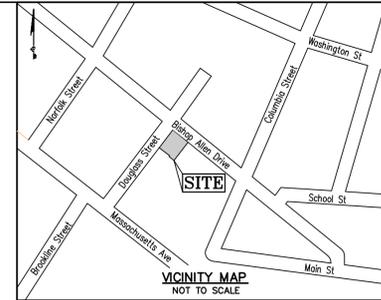
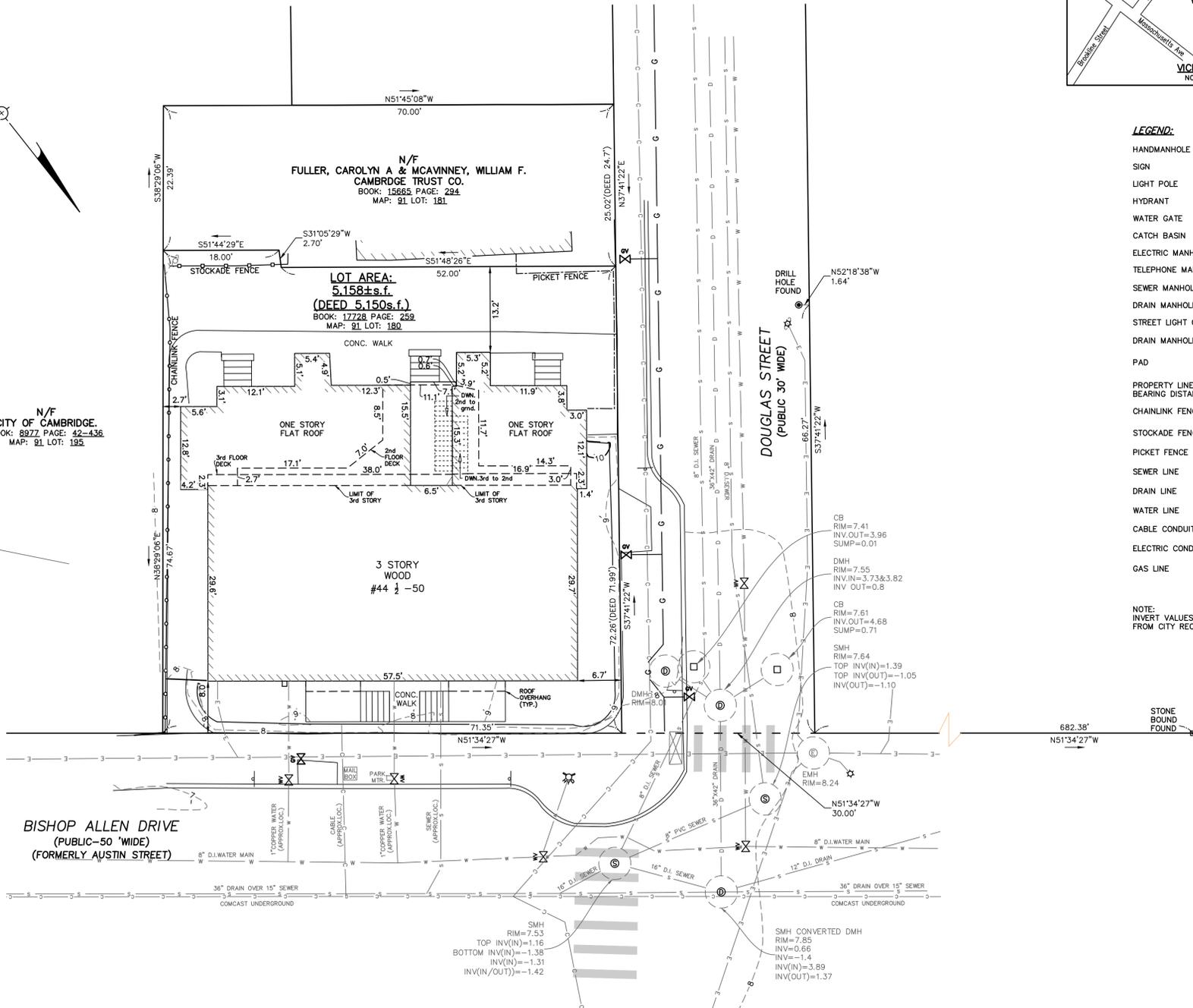
GENERAL NOTE:

- NO EVIDENCE OF CEMETERIES.
- LEGAL DESCRIPTION FORMS MATHEMATICALLY CLOSED FIGURE WITH OUT GAPS, GORES OR OVERLAPS.
- THE PROPERTY HAS DIRECT ACCESS FROM THE NORTH, TO BISHOP ALLEN DRIVE A DEDICATED PUBLIC STREET AND THE WEST TO DOUGLAS STREET A DEDICATED PUBLIC STREET.
- NO OBSERVED EVIDENCE OF CURRENT EARTH MOVING WORK, BUILDING CONSTRUCTION OR BUILDING ADDITIONS.
- NO PROPOSED CHANGES IN STREET RIGHT OF WAY LINES. NO OBSERVED EVIDENCE OF RECENT STREET OR SIDEWALK CONSTRUCTION OR REPAIRS.
- NO OBSERVED EVIDENCE OF SIDE USE AS A SOLID WASTE DUMP, SUMP OR SANITARY LANDFILL.
- BENCHMARK: CITY OF CAMBRIDGE DATUM
- PARCEL ID MAP 91-LOT 180

EASEMENTS:



N/F
CITY OF CAMBRIDGE.
BOOK: 8977 PAGE: 42-436
MAP: 91 LOT: 180



RESERVED FOR REGISTRY USE

LEGEND:

- HANDMANHOLE HH
- SIGN
- LIGHT POLE
- HYDRANT
- WATER GATE
- CATCH BASIN
- ELECTRIC MANHOLE
- TELEPHONE MANHOLE
- SEWER MANHOLE
- DRAIN MANHOLE
- STREET LIGHT CONTROL BOX
- DRAIN MANHOLE
- PAD
- PROPERTY LINE W/ BEARING DISTANCE
- CHAINLINK FENCE
- STOCKADE FENCE
- PICKET FENCE
- SEWER LINE
- DRAIN LINE
- WATER LINE
- CABLE CONDUIT
- ELECTRIC CONDUIT
- GAS LINE

PLAN REFERENCE:

PLAN BOOK: 7080 PAGE: 467
PARCEL BLOCK MAP: 91

DEED REFERENCE:

BOOK: 17728 PAGE: 259

ZONING REQUIREMENTS:

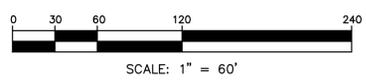
	Required
Lot Size	300/DU*
Lot Width	None
Max. F.A.R.	2.75/3.0
Max. Height Stories	80'
Min. Usable Open space	None
Min. Front Setback	None
Min. Side Yard	None
Min. Rear Yard	None

*Lot Size-min area/DU-minimum allowed ratio of parcels lot area, expressed in feet, divided by the number of dwelling units on that parcel

NOTE: INVERT VALUES ARE FROM CITY RECORDS

FLOOD ZONE:
SAID DESCRIBED PROPERTY IS LOCATED WITHIN AN AREA HAVING A ZONE DESIGNATION "ZONE X" DETERMINED FROM F.E.M.A. ON FLOOD INSURANCE RATE MAP No. 25017C0576E, EFFECTIVE JUNE 4, 2010.

UTILITY NOTE:
UNDERGROUND LOCATIONS AS SHOWN HEREON ARE TAKEN FROM AVAILABLE RECORD INFORMATION AND ARE APPROXIMATE ONLY. BEFORE PLANNING ANY CONSTRUCTION THE VARIOUS UTILITY COMPANY ENGINEERING DEPARTMENTS SHOULD BE CONSULTED.



TOPOGRAPHIC SITE PLAN

**44 1/2 -50 BISHOP ALLEN DRIVE
CAMBRIDGE, MASSACHUSETTS**

OWNER: GEORGE ROTHMAN & STUART J. ROTHMAN,
TRUSTEES OF STU-LIN FAMILY TRUST
CAMBRIDGE, MASSACHUSETTS

DATE: 09/27/2018
REVISED: 05/31/2019
SCALE: 1"=10'
PROJECT: 218169
SHEET: 1 OF 1

VTP ASSOCIATES, INC.
LAND SURVEYORS - CIVIL ENGINEERS
132 ADAMS STREET 2ND FLOOR SUITE 3
NEWTON, MA. 02458
(617) 332-8271 FAX: (617) 969-2330

218169_dp.dwg (2/20/21)

LEGEND

- BUILDING
PROPERTY LINE W/ BEARING DISTANCE
CONTOUR
STOCKADE FENCE
CHAINLINK FENCE
PICKET FENCE
SEWER LINE
DRAIN LINE
WATER LINE
GAS LINE
GAS VALVE
WATER VALVE
DRAIN MANHOLE
SEWER MANHOLE
CATCH BASIN
UTILITY POLE
LIGHT POLE
DECIDUOUS TREE
CONIFEROUS TREE
HYDRANT

Table with 7 columns: Fixture Type (Kitchen Sink, Dish Washer, Laundry, Bath Sink, Toilet, Bath Tub, Shower), Hot/Cold status, and Sub-Total. Includes sections for Proposed Fixture Count (Levels One through Seven) and Existing Fixture Count.

TOTAL FACTOR VALUE 243
Multi-residential Coefficient 0.35
Capacity Value 85.05
Q (gpm) 40.00
Ø (in) 2.00

TOTAL FACTOR VALUE 58
Multi-residential Coefficient 0.35
Capacity Value 20.30
Q (gpm) 18.00
Ø (in) 1.00

DIG SAFE

EXCAVATORS BEFORE YOU DIG CONTACT THE DIG SAFE CENTER TO PREVENT DAMAGE TO TELEPHONE, GAS OR ELECTRIC UNDERGROUND FACILITIES OF MEMBER UTILITIES, CALL TOLL FREE 1-888-DIG-SAFE. MASSACHUSETTS STATE LAW REQUIRES NOTIFICATION AT LEAST THREE BUSINESS DAYS BEFORE YOU START DIGGING OPERATIONS. IN AN EMERGENCY, CALL IMMEDIATELY



SCALE: 1" = 10'

SEWER DESIGN FLOWS:

PROPOSED SEWER FLOW: 44 BEDROOMS @ 110 GALLONS/DAY/BEDROOM=4,840 GALLONS/DAY
EXISTING SEWER FLOW: 12 BEDROOMS @ 110 GALLONS/DAY/BEDROOM=1,320 GALLONS/DAY
INCREASE IN FLOW=3,520 GALLON/DAY

NOTES:

- 1. THE CONTRACTOR SHALL BE RESPONSIBLE FOR VERIFYING AND DETERMINING THE LOCATION, SIZE AND ELEVATION OF ALL EXISTING UTILITIES, SHOWN OR NOT SHOWN ON THIS PLAN. PRIOR TO ANY CONSTRUCTION, THE ENGINEER SHALL BE NOTIFIED IN WRITING OF ANY UTILITIES FOUND INTERFERING WITH THE PROPOSED CONSTRUCTION AND APPROPRIATE REMEDIAL ACTION BEFORE PROCEEDING WITH THE WORK.
2. THE LOCATION OF ALL UTILITIES SHOWN HEREON ARE APPROXIMATE AND ARE BASE ON THE FIELD LOCATION OF ALL VISIBLE STRUCTURES SUCH AS CATCH BASINS, MANHOLES, WATER GATES, ETC. AND GOVERNMENT AGENCIES.

INSPECTION SIGN-OFF SCHEDULE table with columns: #, DESCRIPTION OF SERVICE, CAMBRIDGE INSPECTOR, DATE, COMMENTS. Lists services like Sewer Dye Test, Sewer Insert-A-tee, Water Service, Fire Protection Line, etc.

GENERAL NOTES:

- 1. IF PLUMBING FIXTURES ARE TO BE INSTALLED IN THE BASEMENT A BACKWATER VALVE IS REQUIRED.
2. A DYE TEST SHALL BE PERFORMED BY A CAMBRIDGE INSPECTOR PRIOR TO THE ISSUANCE OF AN OCCUPANCY CERTIFICATE.
3. ALL WORK SHALL CONFORM TO THE STANDARD SPECIFICATION OF THE CAMBRIDGE WATER AND SEWER COMMISSION AND THE CITY OF CAMBRIDGE DEPARTMENT OF PUBLIC WORKS.
4. A PREREQUISITE FOR FILING A GENERAL SERVICE APPLICATION WITH THE CAMBRIDGE WATER AND SEWER COMMISSION FOR NEW CONSTRUCTION IS THE ROUGH CONSTRUCTION SIGN-OFF DOCUMENT FROM THE CITY OF CAMBRIDGE INSPECTIONAL SERVICE DEPARTMENT.

AVERAGE GRADE CALCULATION
(20.0+20.0+20.0+20.0)/4=20.0

PROPOSED BUILDING HEIGHT
NOT TO SCALE

OWNER: GEORGE ROTHMAN & STUART ROTHMAN TRUSTEES OF STU-LIN FAMILY TRUST
907 MASSACHUSETTS AVENUE
CAMBRIDGE, MA 02139
PHONE: (617)547-6559
DEED REFERENCE: BOOK 17728 PAGE 259
PLAN REFERENCE: BOOK 7080 PAGE 467
PARCEL ID MAP 91-LOT 180

INFORMATION REFERENCES:

WATER: CAMBRIDGE W+S NOTES
SEWER: CAMBRIDGE W+S NOTES
BENCHMARK: BENCHMARK: NGVD1929 DATUM

FLOOD ELEVATIONS:

REFERENCE CITY OF CAMBRIDGE FLOOD VIEWER

Table with 2 columns: Precipitation Period (2070-10 Year, 2070-100 Year) and Precipitation Value (19.0, 20.4).

ZONING CHART

WATERTOWN, MASSACHUSETTS

ZONE: BB-BUSINESS B SUBMISSION: PROPOSED

Zoning Chart table with columns: Regulation, Required, Existing, Proposed. Rows include Lot Area, Lot Width, Front Setback, Side Setback, Rear Setback, Building Height, Average Grade, Usable Open Space.

* NON-CONFORMING

*LOT SIZE-MIN AREA/DU-MINIMUM ALLOWED RATIO OF PARCELS LOT AREA, EXPRESSED IN FEET, DIVIDED BY THE NUMBER OF DWELLING UNITS ON THAT PARCEL

TOPOGRAPHIC SITE PLAN
CAMBRIDGE, MASSACHUSETTS

SHOWING PROPOSED CONDITIONS AT #44 1/2 -50 BISHOP ALLEN DRIVE

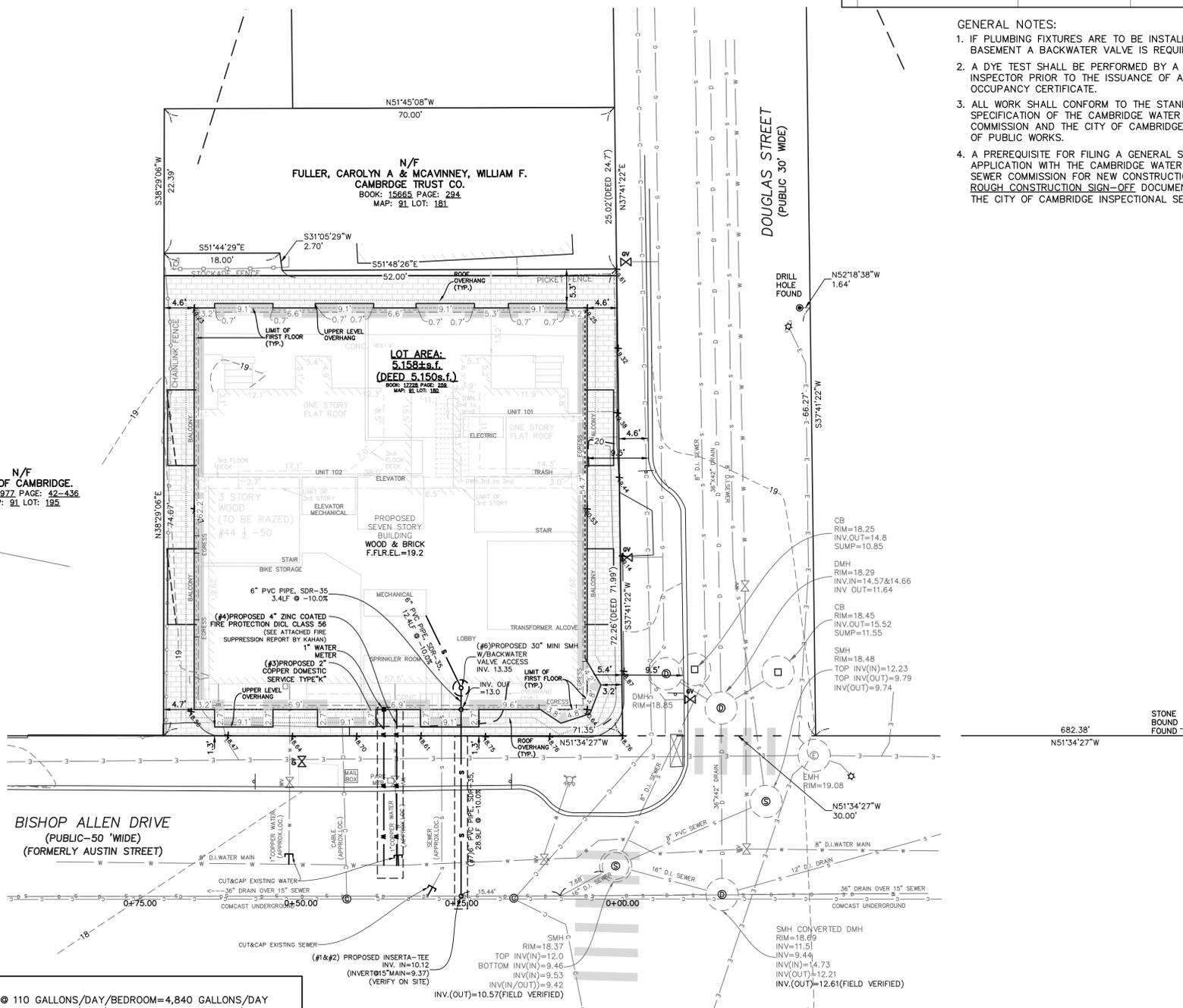
SCALE: 1in.=10ft. DATE: NOVEMBER 26, 2019
REVISED: MARCH 31, 2021; JUNE 25, 2021; NOVEMBER 24, 2021

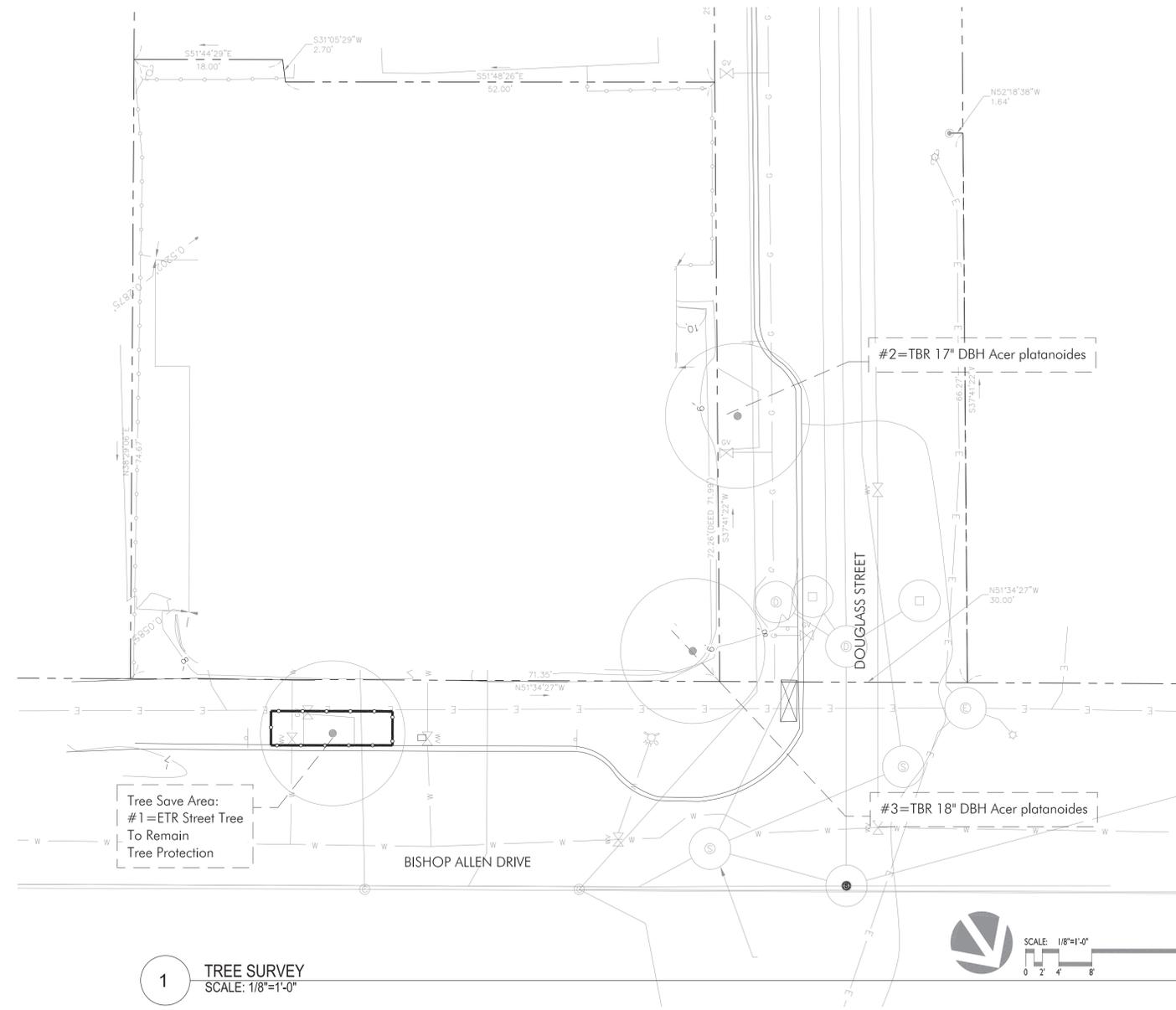
PROJECT: 218169

VTP ASSOCIATES INC.

LAND SURVEYORS - CIVIL ENGINEERS.
132 ADAMS STREET 2ND FLOOR SUITE 3
NEWTON, MA 02458
(617) 332-8271

SHEET 1 OF 3





1 TREE SURVEY
SCALE: 1/8"=1'-0"

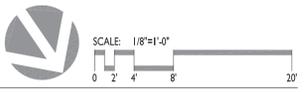
Tree Survey

Existing Trees on the Project Site subject to Ordinance:
At the corner of Bishop Allen Drive and Douglass Street there is an existing 18" DBH Acer platanoides/Norway Maple which must be removed for the development. Acer platanoides are undesirable invasive trees and will be replaced by desirable species.
Total 18" DBH total inches

Existing Street Trees Adjacent to the Project Site:
There is one street tree on Bishop Allen Drive:
▪ A 13" Pyrus calleryana "Bradford/Bradford Pear that will need to be pruned back from the building edge. Tree protection measures as described below will be implemented.
There is one street tree on Douglass Street:
▪ A 17" Acer platanoides/ Norway Maple

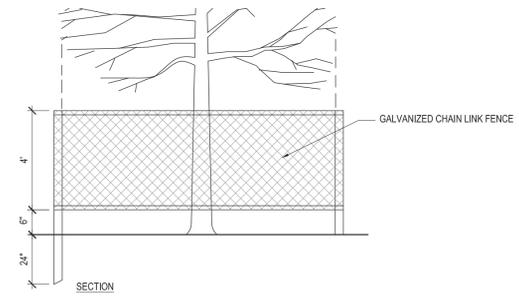
Tree Protection Plan:
The street tree on Bishop Allen Drive will be protected from damage during site construction with a skirt of 2x3 boards wired around their base and Chain Link Fence Tree Protection, see detail below.

Excavation equipment will not be allowed to operate over the open tree pit. Existing sidewalk pavement will be maintained throughout the construction period and replaced after the building is substantially completed. The existing pavement will be carefully removed.



BISHOP ALLEN @ DOUGLASS PLANT LIST

KEY	QTY	BOT. NAME	COMMON NAME	MIN. SIZE	NOTES
Trees:					
JV	2	Juniperus virginiana 'Taylor'	Taylor Eastern Red Cedar	4/5'=3'cal.	B&B Native
LS	2	Liquidambar styraciflua	Slender Silhouette Sweetgum	2-2.5 cal.	B&B Native
PS	3	Pinus strobus 'Fastigiata'	Columnar Eastern White Pine	4/5'=3'cal.	B&B Native
UA	1	Ulmus americana 'Valley Forge'	American Elm	3-3.5' cal.	B&B Native
Shrubs:					
KL	4	Kalmia latifolia	Mountain Laurel	7 gal.	Native
TB	3	Taxus baccata 'Erecta'	Columnar English Yew	4/5'	B&B
Perennials:					
at	13	Asclepias tuberosa	Butterfly Weed	2 gal.	18" oc Native
cp	115	Carex pensylvanica	Oak Sedge	1 gal.	18" oc Native
cd	31	Carex dolichostachya 'Kaga Nishiki'	Gold Fountains Sedge	2 gal.	18" oc
ep	13	Echinacea purpurea	Purple Coneflower	2 gal.	18" oc Native
mf	13	Monarda fistulosa	Wild Bergamont	1 gal.	18" oc Native
pv	13	Panicum virgatum	Switchgrass	2 gal.	18" oc Native



- NOTES**
1. Installed tree protection must be in place prior to any work (including demolition), and approved by landscape architect. Tree protection to remain in place throughout construction. Remove for final landscape treatment, after approval by landscape architect.
 2. Adjust location of tree protection within tree drip line only when necessary to perform work shown on drawings.
 3. Stockpiling of soils, storing of materials, parking of vehicles or location of temporary structures shall not occur at any time within the drip line of trees to remain.
 4. All work within drip line must be done by hand.

2 TREE PROTECTION
SCALE: 1"=1'-0"

Tree Survey

ID	Location	DBH	Species	Notes
1	Street Tree on Bishop Allen Drive	13" DBH	Bradford Pear	Pyrus calleryana 'Bradford'
2	Street Tree on Douglas On Site	17" DBH	Norway Maple	Acer platanoides
3	On Site	18" DBH	Norway Maple	Acer platanoides
		18" Total On Site		

Tree Mitigation

Species	Caliper of Trees To Be Removed	Total Caliper of Proposed Trees
Existing Acer platanoides (DBH)	18"	
Juniperus virginiana 'Taylor'		6"
Liquidambar styraciflua		4"
Pinus strobus 'Fastigiata'		9"
Total	18	19"

DBH = Diameter at Breast Height = trunk diameter measured 4 1/2 feet from the ground
CAL = Caliper = Diameter at Breast Height = trunk diameter measured 4 1/2 feet from ground

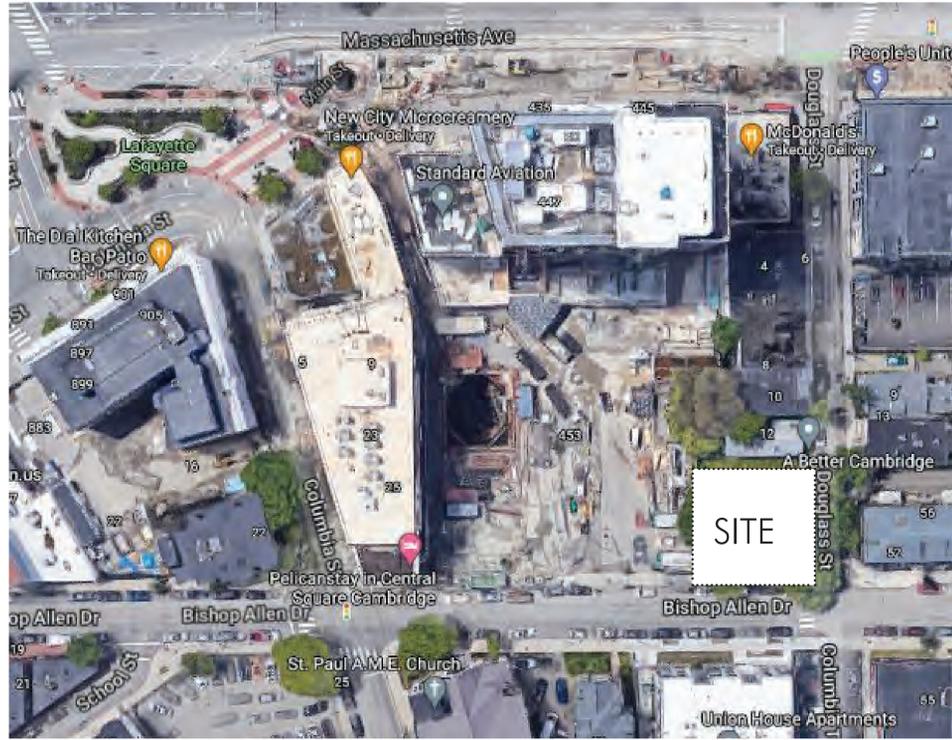
BISHOP ALLEN @ DOUGLASS
CAMBRIDGE, MA

TREE STUDY

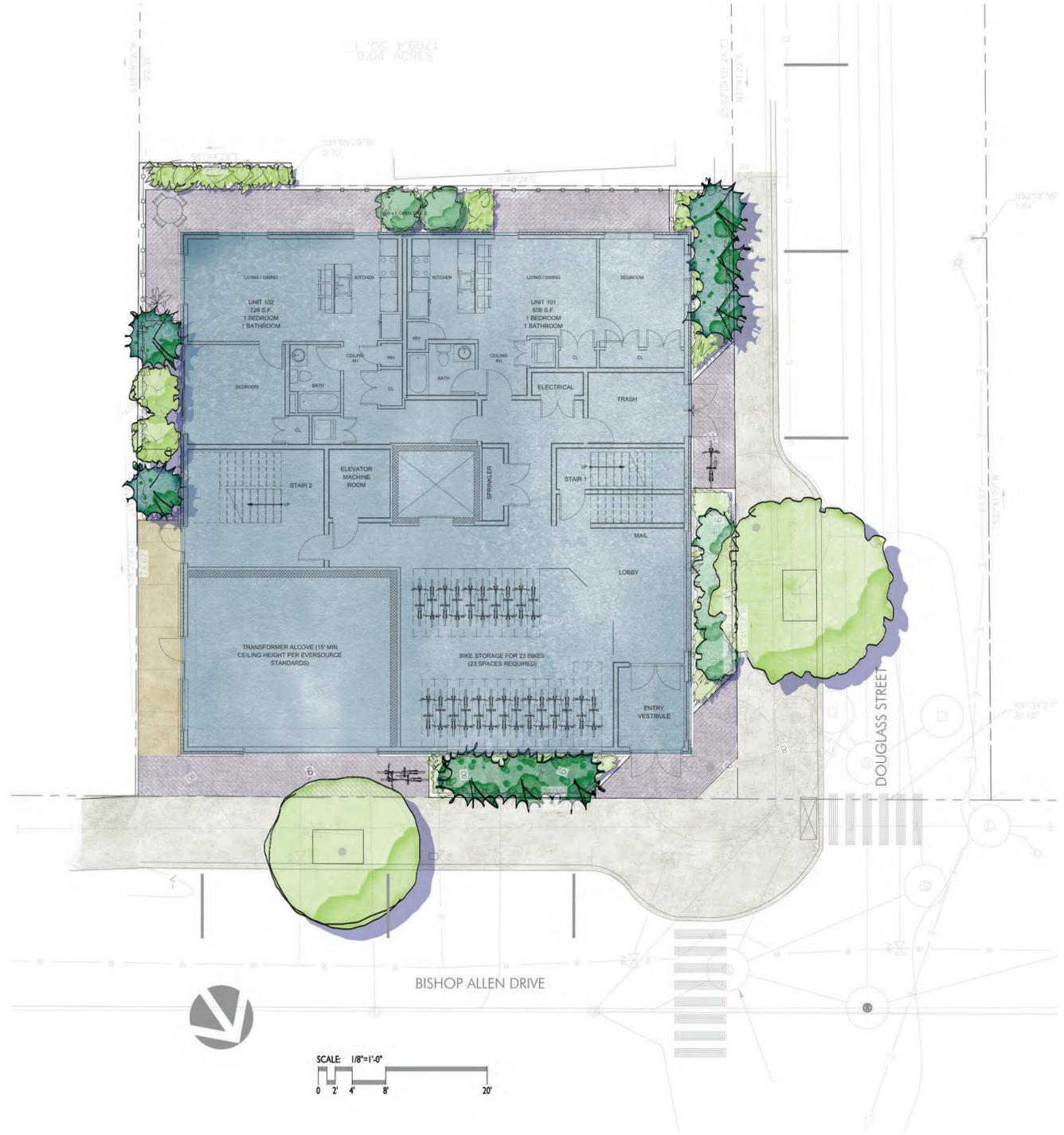
Project #:	Date: 03/03/21
Drawn by:	Reviewed: BH
Scale: As Noted	

Revisions:

L1



Locus



BISHOP ALLEN @ DOUGLASS
CAMBRIDGE, MA

ADJACENT DEVELOPMENTS

Project #:	Date: 04/13/21
Drawn by:	Reviewed: BH
Scale: As Noted	

Revisions:

L2

Columnar Trees Along Property Lines



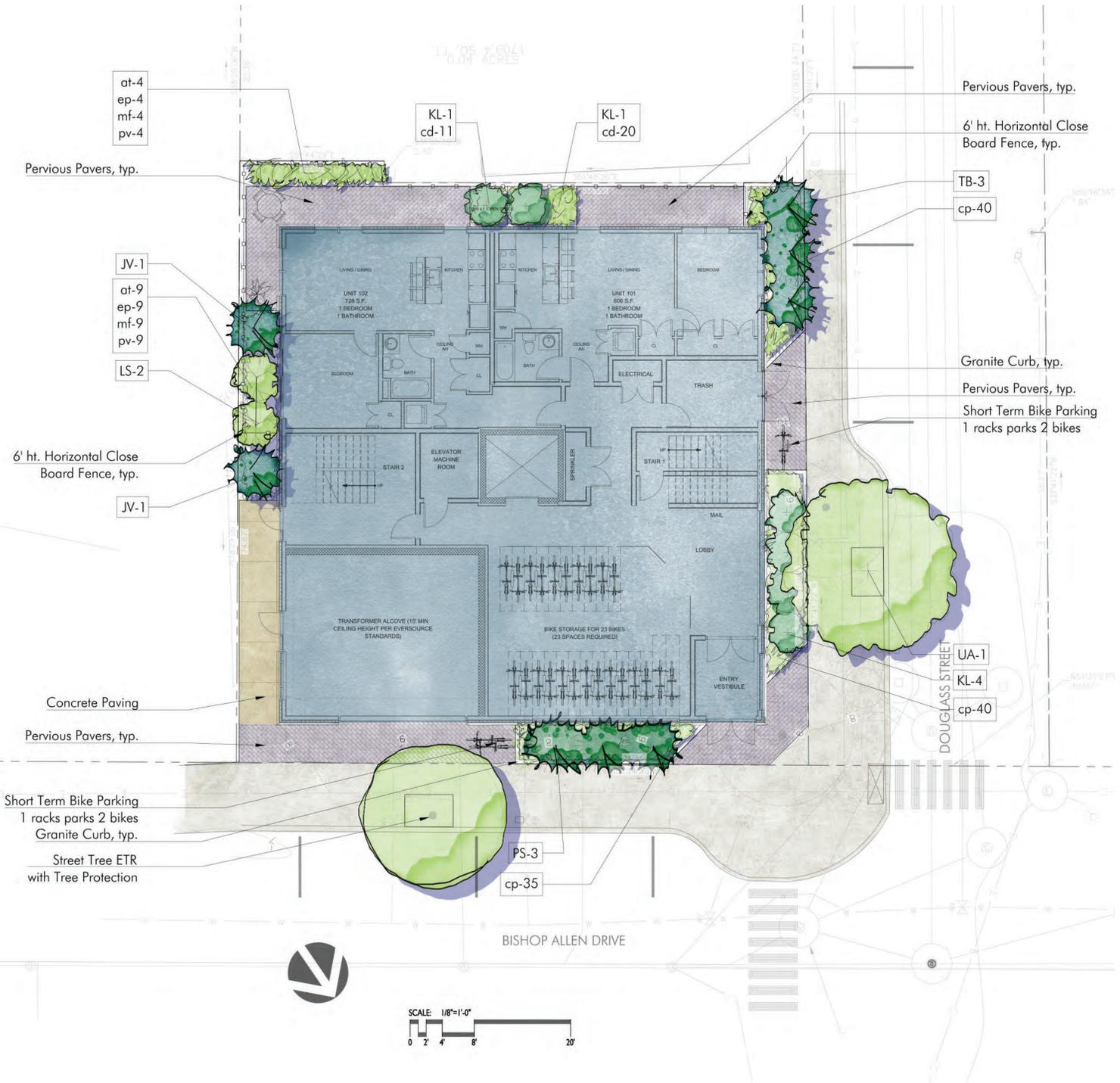
CONCEPT PLANTINGS FOR URBAN CONDITIONS
Support Biodiversity, Sustainability and Water Management

- Using wildlife friendly plantings & practices with a range of trees, shrubs, perennials and groundcovers, helps support biodiversity in the neighborhood
- Dense plantings minimize maintenance and eliminates mowing

6' Ht. Horizontal Close Board Fence

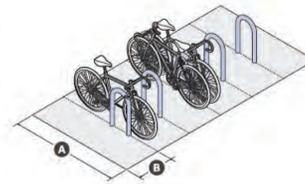


Pervious Pavers by Endicott | Coordinate colors with Architects



1. General

- Design Guidance**
 - The City of Somerville's Bicycle Parking Guide and the latest version of the Association of Pedestrian and Bicycle Professionals Bicycle Parking Guidelines should be referenced for guidance.
- Size & Layout**
 - Each bicycle parking space must be two (2) feet by six (6) feet in size or the minimum required by the manufacturer of a bicycle rack or locker, whichever is more.
- ACCESS**
 - Areas designed for bicycle parking spaces must have a hard, stabilized surface.
 - Bicycle parking spaces must have at least one (1)



Somerville Zoning Ordinance 11.1 Bicycle Parking

BISHOP ALLEN @ DOUGLASS PLANT LIST

KEY	QTY	BOT. NAME	COMMON NAME	MIN. SIZE	NOTES
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KL	4	Kalmia latifolia	Mountain Laurel	7 gal.	Native
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cd	31	Carex dolichostachya 'Kaga Nishiki'	Gold Fountains Sedge	2 gal.	18" oc
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mf	13	Monarda fistulosa	Wild Bergamont	1 gal.	18" oc Native
pv	13	Panicum virgatum	Switchgrass	2 gal.	18" oc Native



BISHOP ALLEN @ DOUGLASS
CAMBRIDGE, MA

LANDSCAPE SITE PLAN

Project #:	Date: 04/13/21
Drawn by:	Reviewed: BH
Scale: As Noted	

Revisions:

L3

PROJECT NAME

Bishop Allen @ Douglass

PROJECT ADDRESS
BISHOP ALLEN DRIVE
@ DOUGLASS STREET
CAMBRIDGE, MA

CLIENT

FIRST CAMBRIDGE

ARCHITECT



17 IVALOO STREET SUITE 400
SOMERVILLE, MA 02143
TELEPHONE: 617-591-8682

CONSULTANTS:

LANDSCAPE:
VERDANT LANDSCAPE
ARCHITECTURE
318 HARVARD STREET SUITE 25
BROOKLINE, MA 02446

CIVIL:
VTP ASSOCIATES, INC
132 ADAMS STREET,
2ND FLOOR SUITE 3
NEWTON, MA 02458

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OF PROSECUTION UNDER LAW

REGISTRATION



Project number 18132
Date 2/18/2022
Drawn by ERS
Checked by JSK
Scale 1/8" = 1'-0"

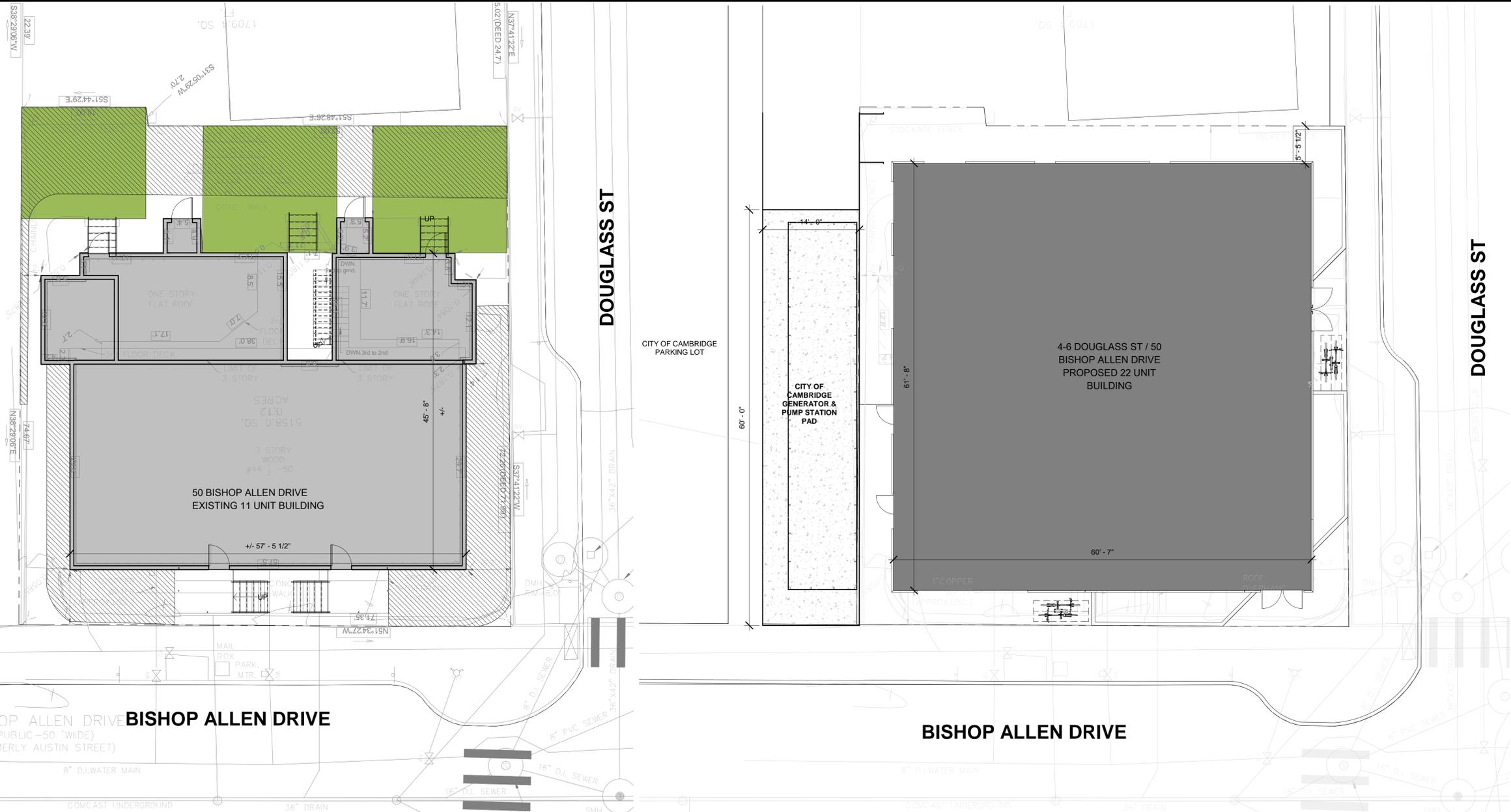
REVISIONS

No.	Description	Date

Existing & New
Site Plans

A-021

Bishop Allen @ Douglass



1 Site Plan - Existing
1/8" = 1'-0"

2 Site Plan - Proposed
1/8" = 1'-0"



\\TKG-SERVER\Drawn\18132-FC-BAD-Douglass-Cambridge\03_Drawings\00_ARCH_S\DD18132-Bishop Allen Drive at Douglass Street-updated transformer.rvt 2/17/2022 10:11:42 AM

HOW MUCH BICYCLE PARKING IS REQUIRED BY ZONING?

The tables below summarize the zoning requirements for some typical land uses. For more detail, review Section 6.100 of the Zoning Ordinance. When calculating the required number of long-term or short-term bicycle parking spaces for a particular use, round up to the nearest whole number.

Residential Use Type	Minimum Required Bicycle Parking (see pg. 7 for more details)	
	Long-Term	Short-Term
Single-family dwellings	No minimum	No minimum
Two-family dwellings Rectories, parsonages	No minimum	No minimum
Townhouse dwellings	1.00 space per unit for the first 20 units in a building;	0.10 space per unit on a lot (for lots with 4 or more units)
Multifamily dwellings	1.05 spaces per unit for additional units	
Elderly oriented congregate housing	0.50 space per unit	0.05 space per unit
Lodging houses, convents, monasteries, dormitories, fraternities, sororities	0.50 space per bed	0.05 space per bed
Hotels, motels	0.02 space per sleeping room	0.05 space per sleeping room
Tourist houses		

Note:
Where four or fewer long-term bicycle parking spaces are required, they may be provided in a covered outdoor location rather than an enclosed structure.



photo by Greg Rasmussen

3

ACCEPTABLE BICYCLE RACKS

There are a variety of designs for bicycle racks produced by many manufacturers. Bike racks can be purchased as single units, with a capacity of locking 2 bikes (one on each side), or as multiple units attached together, with a larger capacity. However, not all manufactured bicycle racks meet Cambridge's standards.



Features of an acceptable bicycle rack:

- Installed on a permanent foundation (e.g., concrete pad) to ensure stability.
- Securely anchored into or on the foundation with tamper-proof nuts if surface mounted.
- Support for an upright bicycle by its frame horizontally in two (2) or more places.
- Keeps both bike wheels on the ground.
- Design that prevents the bicycle from tipping over.
- Ability to support a variety of bicycle sizes and frame shapes.
- Space to secure the frame and one or both wheels to the rack with a cable, chain, or u-lock.
- Diameter of locking pole is no more than 1.5 inches.
- Galvanized or stainless steel racks are recommended (and required for racks on public property) because they hold up best.



photo by Greg Rasmussen



Acceptable racks, like the "Inverted U," "Swerve," and "Post and Ring" racks, have two-point support and fit a variety of bicycle types. Custom designs and "artistic" racks can also be used, provided they meet the performance criteria for bicycle racks.

8

SITING BICYCLE PARKING

Bicycle parking must be designed for convenient daily use, not simply for storage of bicycles. Location is an extremely important factor in the usefulness of a bicycle rack. The rack must be located in a safe and accessible place with adequate space to maneuver a bicycle in and out.

Safe locations are:

- In full view, maximizing visibility and minimizing vandalism, near pedestrian traffic, windows, and/or well-lit areas.
- Under cover, to protect bicycles from inclement weather.
- Far enough away from the street or parking spaces so that bicycles will not be damaged by cars, setback if possible.
- Not obstructing pedestrian traffic.

Accessible locations have these characteristics:

- They are between the road/path that cyclists use and the entrance of the building.
- The primary access route is at least 5 feet wide.
- The primary access route does not have a slope greater than 5% (8% if level landing is provided every 30 feet of linear distance).
- Access may be provided by an elevator with interior dimensions of 80" x 54".
- Close to the main entrance that cyclists use for the building. For short-term parking within 25' is ideal but no more than 50' is required.

Weather-protected bicycle parking is desirable where bikes are parked for long periods.



6



photo by John Latour

SHORT-TERM AND LONG-TERM PARKING

Some aspects of bicycle parking are different depending on whether it will serve people who are storing bicycles all day long or overnight, or people who are making short trips to and from the site.

Long-Term:

Long-term Bicycle Parking must be located in an enclosed, limited-access area designed to protect bicycles from precipitation and from theft. It may be provided in the following types of facilities:

- Enclosed spaces in a building, such as bicycle rooms or garages.
- Bicycle sheds, covered bicycle cages, or other fully covered and enclosed structures within 200 feet of the main building entrance.
- Bicycle lockers, or fixed-in-place containers wherein single bicycles may be securely stored and protected.
- Weather-protected bicycle parking spaces that are monitored at all times by an attendant or other security system.

Short-Term:

Short-term bicycle parking must be located in a publicly accessible space within 50 feet of pedestrian entrances. Short-term bicycle parking is intended primarily to serve visitors, such as retail patrons making trips of up to a few hours; however, it may serve other bicycle users as needed.

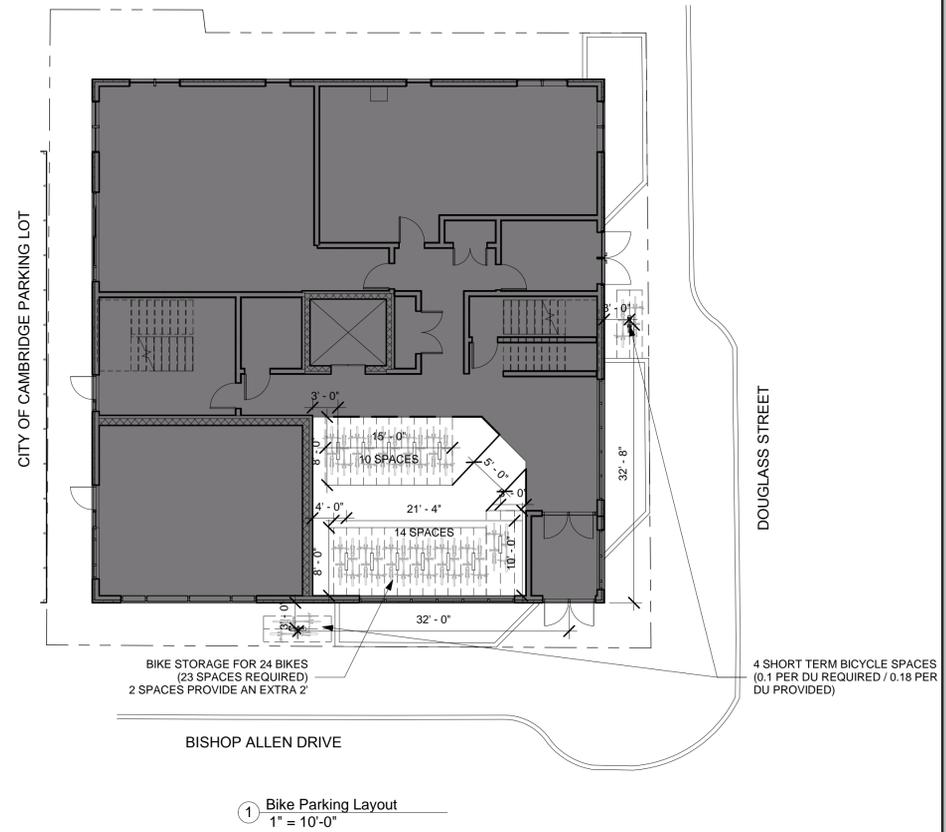
PARKING GARAGES

Bicycle parking in parking garages must be either on the same level as the entrance to the garage from the street or accessible via automobile ramps designed to serve bicyclists (with slope of less than 5% or less than 8% with a landing every 30 feet), or near an elevator that is sufficiently large to accommodate bicycles. Bicycle racks inside parking garages must still meet the security standards of short-term racks or lockers. Where long-term bicycle parking is next to automobile parking or loading, a physical barrier, such as bollards, must be provided.



photo by Norman Cox

7



1 Bike Parking Layout
1" = 10'-0"

UNACCEPTABLE BICYCLE RACKS

Bicycle racks must NOT:

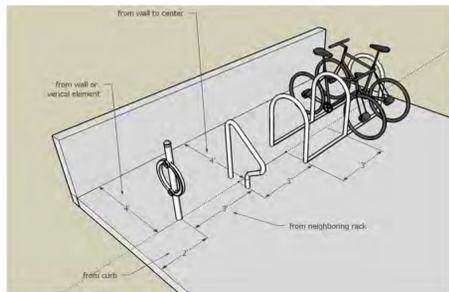
- Support the bicycle at only one point.
- Allow the bicycle to fall, which can damage the bike and block pedestrian right-of-way.
- Have sharp edges, that can be hazardous to the visually impaired.
- Support the bicycle by one wheel.
- Connect to each other with a bar on top (that can block handlebars and baskets).
- Suspend any part of the bike in the air or require that the bicycle be lifted to get it into position.



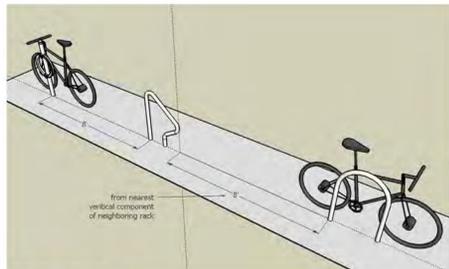
9

LAYOUT DIMENSIONS

Proper layout of bicycle racks is essential to ensure that they will safely and conveniently accommodate the intended number of bicycles. Layout must follow these minimum dimensions:

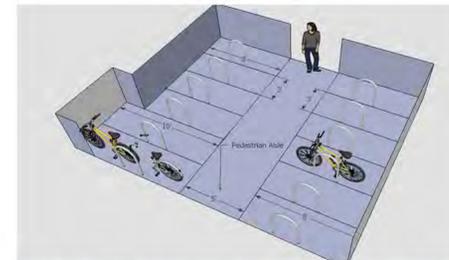


Racks aligned side by side



Racks aligned end to end

10



Enclosed rack area with 20 or more racks, with pedestrian aisle and at least 5% of spaces providing an additional 2 feet of space for tandems and trailers.

Distance to other Racks:

- Rack units aligned parallel to each other (side by side) must be at least 3 feet apart. This includes racks that are sold as multiple rack units attached together.
- Rack units aligned end to end must be at least 8 feet apart.

Distance from Wall:

- Rack units placed perpendicular to a wall must be at least 4 feet from the wall to the center of the rack.
- Rack units parallel to a wall must be at least 3 feet from the rack to the wall.

Distance from a Curb:

- Rack units placed perpendicular to the curb must be at least 4 feet from the curb to the center of the rack.
- Rack units placed parallel to the curb must be at least 2 feet from the curb to the rack.

Distance from a Pedestrian Aisle:

- Rack units perpendicular to a pedestrian aisle must be at least 4 feet from the center of the rack to the edge of the aisle, and have at least a 5 feet wide aisle.
- Where 20 or more bicycle parking spaces are required, at least 5% of the spaces must be 10 feet long instead of 8 feet to allow space for tandems and trailers.

Other Distances:

- Racks should be at least 14 feet from curbside fire hydrants and 6 feet from wall fire hydrants.

11

PROJECT NAME

**Bishop Allen @
Douglass**

PROJECT ADDRESS
BISHOP ALLEN DRIVE
@ DOUGLASS STREET
CAMBRIDGE, MA

CLIENT

FIRST CAMBRIDGE

ARCHITECT



17 IVALOO STREET SUITE 400
SOMERVILLE, MA 02143
TELEPHONE: 617-591-8682

CONSULTANTS:

LANDSCAPE:
**VERDANT LANDSCAPE
ARCHITECTURE**
318 HARVARD STREET SUITE 25
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REGISTRATION



Project number	18132
Date	2/18/2022
Drawn by	ERS
Checked by	JSK
Scale	1" = 10'-0"

REVISIONS

No.	Description	Date

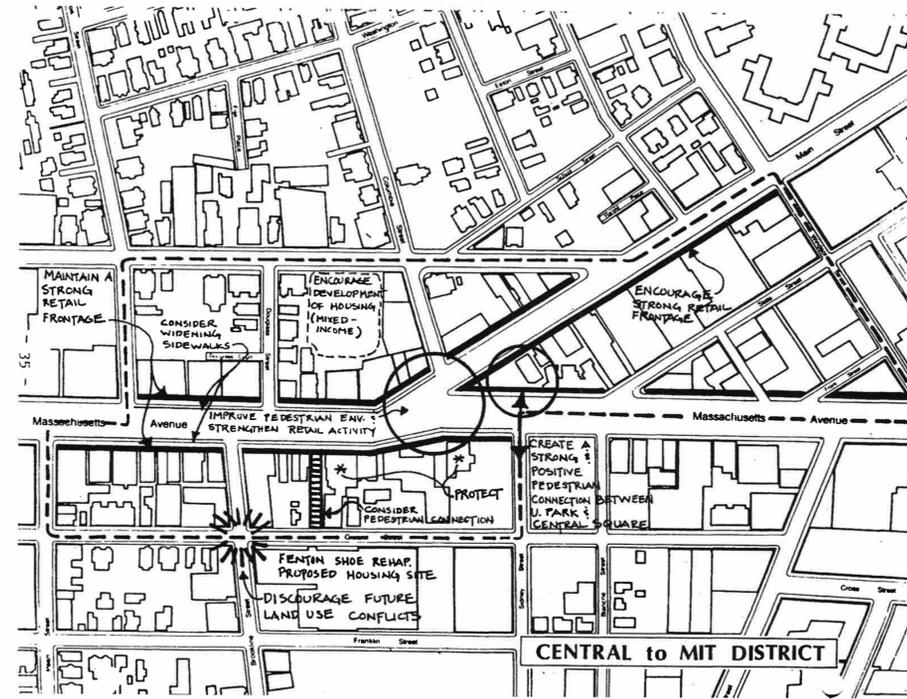
**Bicycle Parking
Plan**

A-023

Bishop Allen @ Douglass

\\TKG-SERVER\Drawings\18132-FC-BAD-Douglass-Cambridge\03_Drawings\01_ARCH_S\DD18132-Bishop Allen Drive at Douglass Street-updated transformer.rvt 2/17/2022 10:12:03 AM

CENTRAL SQUARE ACTION PLAN: "CENTRAL TO MIT" DISTRICT



TRANSITION DISTRICT

The Transition District is the area that separates the main retail activity along Massachusetts Avenue from the strictly residential character of the Cambridgeport neighborhood (refer to map on page 37). As a transitional area the character of the district is mixed from block to block but predominately residential in nature. Very few "soft" development areas exist and except for parcel number 49 assembly of several small lots would be necessary to achieve any sizeable development.

Private Development

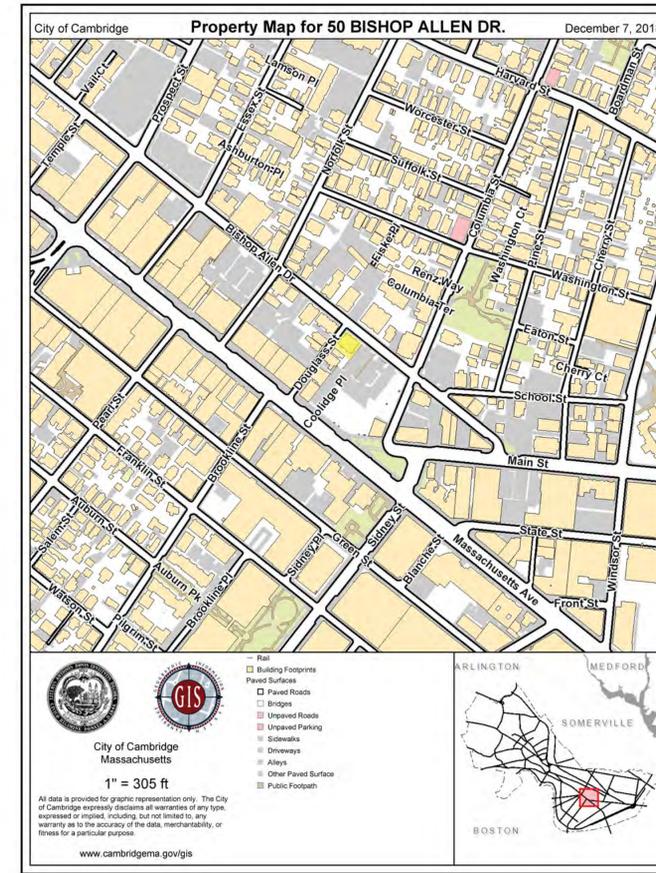
Commercial uses front primarily along Massachusetts Avenue, but some businesses are located along the side streets leading into the Transition District. Businesses along Brookline Street with entertainment licenses have been responsible for land use conflicts in this area. Since these businesses typically are busiest at night more opportunity exists for conflicts with the residential uses than other types of business uses. Complaints such as noise, loitering, and parking violations are common complaints of nearby residents. Only businesses that are compatible with residential uses should be allowed to be located off of the main business area of Massachusetts Avenue and Main Street.

Public Spaces

Presently a new open space project, the Central Square Enhancement Project, is under construction along Western Avenue and River Street. An opportunity exists to extend these improvements down Western Avenue to Auburn and Pleasant Streets to reduce the pedestrian-vehicular conflict at this large intersection.

To further relieve the vehicular congestion on Western Avenue and River Street the State is investigating rerouting truck traffic coming off of the Massachusetts Turnpike and therefore removing it from Western Avenue and River Street. Every effort should be made to encourage this rerouting plan.

Although two municipal parking lots and one municipal parking garage is located on Green Street, parking is a severe problem around the police station. Development of the Central Square Enhancement Project reduced the number of available parking spaces on Western Avenue further adding to this problem. Solutions to the police department parking problem need to be explored further.



PROJECT NAME

**Bishop Allen @
Douglass**

PROJECT ADDRESS
BISHOP ALLEN DRIVE
@ DOUGLASS STREET
CAMBRIDGE, MA

CLIENT

FIRST CAMBRIDGE

ARCHITECT



17 IVALOO STREET SUITE 400
SOMERVILLE, MA 02143
TELEPHONE: 617-591-8682

CONSULTANTS:

LANDSCAPE:
**VERDANT LANDSCAPE
ARCHITECTURE**
318 HARVARD STREET SUITE 25
BROOKLINE, MA 02446

CIVIL:
VTP ASSOCIATES, INC
132 ADAMS STREET,
2ND FLOOR SUITE 3
NEWTON, MA 02458

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REGISTRATION



Project number	18132
Date	2/18/2022
Drawn by	ERS
Checked by	JSK
Scale	

REVISIONS

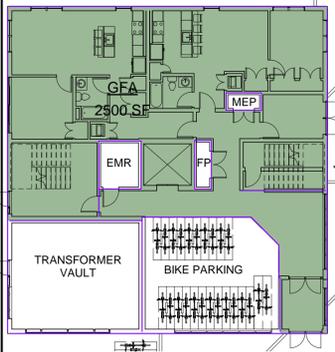
No.	Description	Date

Zoning Maps

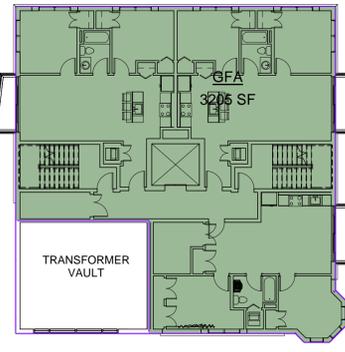
A-024

Bishop Allen @ Douglass

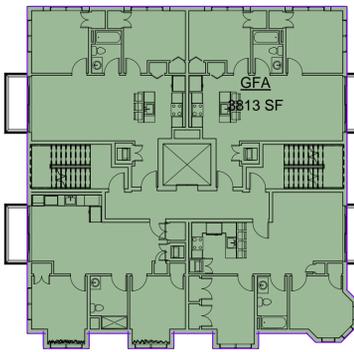
GROSS FLOOR AREA (PER ZONING)



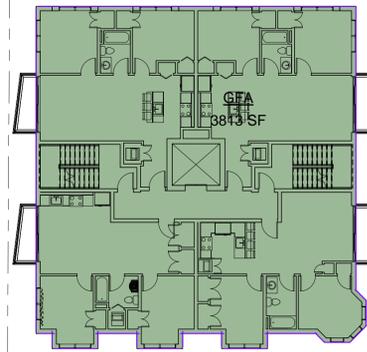
1 1st Floor Level
1/16" = 1'-0"



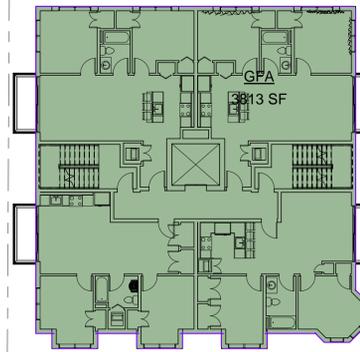
2 2nd Floor
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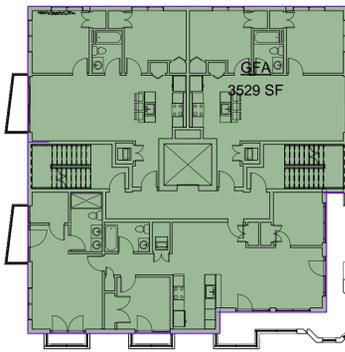
3 3rd Floor
1/16" = 1'-0"



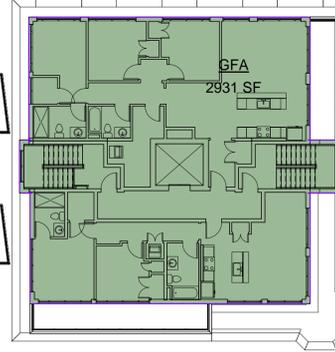
4 4th Floor
1/16" = 1'-0"



5 5th Floor
1/16" = 1'-0"



6 6th Floor
1/16" = 1'-0"

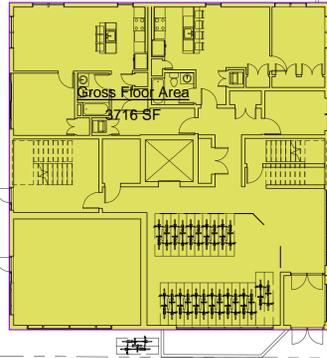


7 7th Floor
1/16" = 1'-0"

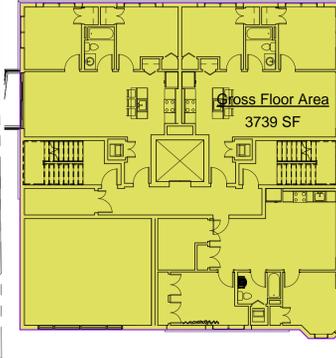
Gross Floor Area (Per Zoning)		
Area	Name	Level
2500 SF	GFA	1st Floor Level
3205 SF	GFA	2nd Floor
3813 SF	GFA	3rd Floor
3813 SF	GFA	4th Floor
3813 SF	GFA	5th Floor
3529 SF	GFA	6th Floor
2931 SF	GFA	7th Floor
23603 SF		

GROSS FLOOR AREA CALCULATED PER THE CITY OF CAMBRIDGE ZONING CODE

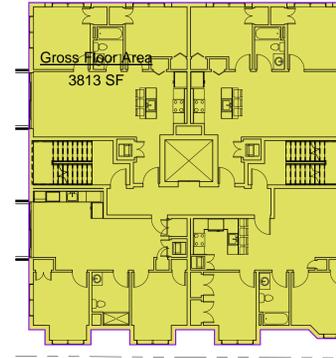
GROSS FLOOR AREA (PER IBC)



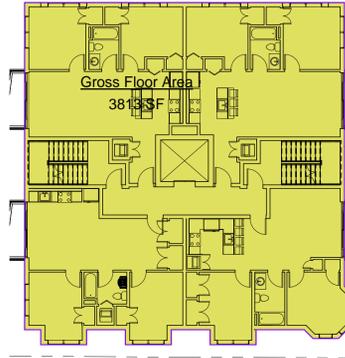
8 1st Floor Level
1/16" = 1'-0"



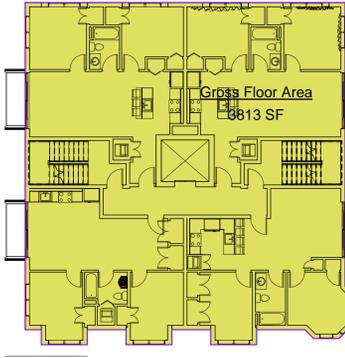
9 2nd Floor
1/16" = 1'-0"



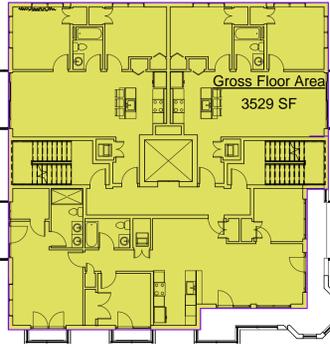
10 3rd Floor
1/16" = 1'-0"



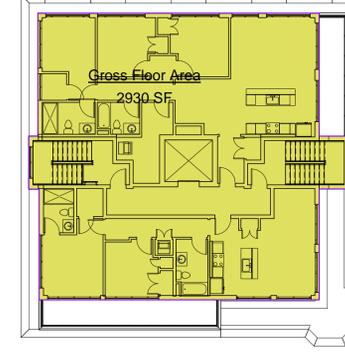
11 4th Floor
1/16" = 1'-0"



12 5th Floor
1/16" = 1'-0"



13 6th Floor
1/16" = 1'-0"



14 7th Floor
1/16" = 1'-0"

GROSS FLOOR AREA PER IBC		
Area	Name	Level
3716 SF	Gross Floor Area	1st Floor Level
3739 SF	Gross Floor Area	2nd Floor
3813 SF	Gross Floor Area	3rd Floor
3813 SF	Gross Floor Area	4th Floor
3813 SF	Gross Floor Area	5th Floor
3529 SF	Gross Floor Area	6th Floor
2930 SF	Gross Floor Area	7th Floor
25352 SF		

TOTAL AREA OF ALL FLOORS WITH NO EXCLUSIONS

PROJECT NAME
Bishop Allen @ Douglass

PROJECT ADDRESS
BISHOP ALLEN DRIVE @ DOUGLASS STREET
CAMBRIDGE, MA

CLIENT
FIRST CAMBRIDGE

ARCHITECT

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TELEPHONE: 617-591-8682**

CONSULTANTS:

LANDSCAPE:
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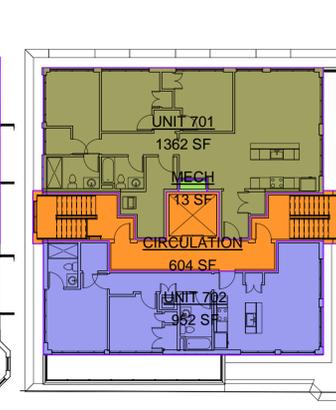
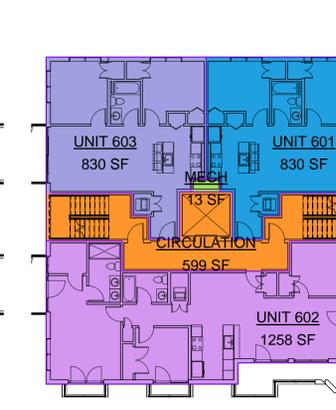
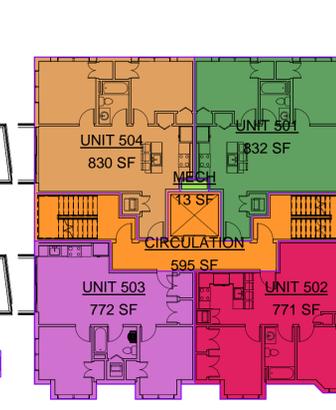
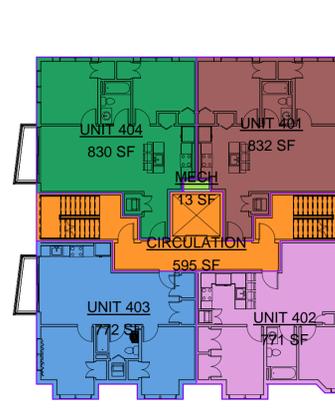
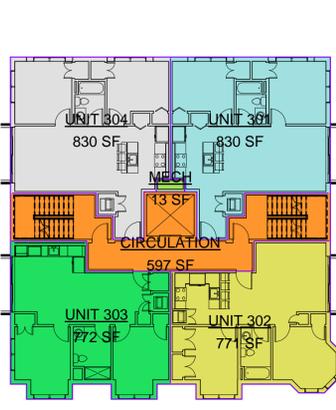
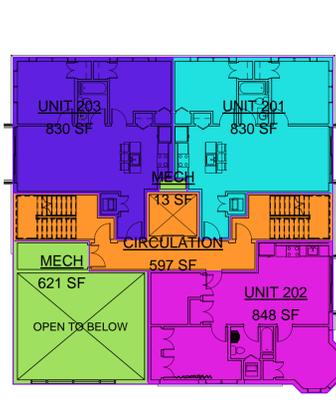
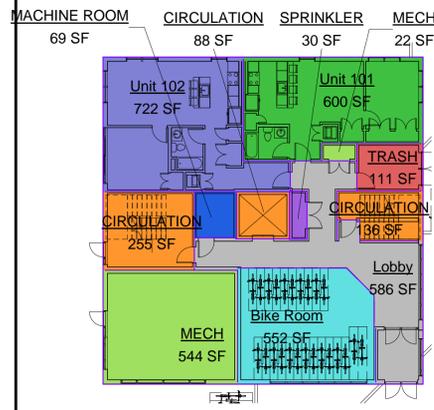
Project number 18132
Date 2/18/2022
Drawn by ERS
Checked by JSK
Scale 1/16" = 1'-0"

REVISIONS

No.	Description	Date

Area Analysis

A-025
Bishop Allen @ Douglass



1 1st Floor Level
1/16" = 1'-0"

2 2nd Floor
1/16" = 1'-0"

3 3rd Floor
1/16" = 1'-0"

4 4th Floor
1/16" = 1'-0"

5 5th Floor
1/16" = 1'-0"

6 6th Floor
1/16" = 1'-0"

7 7th Floor
1/16" = 1'-0"

COMMON AREAS

Unit Areas		
Area	Name	Level
Common		
1st Floor Level		
552 SF	Bike Room	1st Floor Level
478 SF	CIRCULATION	1st Floor Level
586 SF	Lobby	1st Floor Level
69 SF	MACHINE ROOM	1st Floor Level
566 SF	MECH	1st Floor Level
30 SF	SPRINKLER	1st Floor Level
111 SF	TRASH	1st Floor Level
2393 SF TOTAL 1ST FLOOR COMMON AREA		

Unit Areas		
Area	Name	Level
2nd Floor		
597 SF	CIRCULATION	2nd Floor
634 SF	MECH	2nd Floor
1231 SFTOTAL 2ND FLOOR COMMON AREA		

Unit Areas		
Area	Name	Level
3rd Floor		
597 SF	CIRCULATION	3rd Floor
13 SF	MECH	3rd Floor
610 SF TOTAL 3RD FLOOR COMMON AREA		

Unit Areas		
Area	Name	Level
4th Floor		
595 SF	CIRCULATION	4th Floor
13 SF	MECH	4th Floor
608 SF TOTAL 4TH FLOOR COMMON AREA		

Unit Areas		
Area	Name	Level
5th Floor		
595 SF	CIRCULATION	5th Floor
13 SF	MECH	5th Floor
608 SF TOTAL 5TH FLOOR COMMON AREA		

Unit Areas		
Area	Name	Level
6th Floor		
599 SF	CIRCULATION	6th Floor
13 SF	MECH	6th Floor
611 SF TOTAL 6TH FLOOR COMMON AREA		

Unit Areas		
Area	Name	Level
7th Floor		
604 SF	CIRCULATION	7th Floor
13 SF	MECH	7th Floor
617 SF TOTAL 7TH FLOOR COMMON AREA		
6677 SF TOTAL COMMON AREA		

UNIT AREAS

Unit Areas		
Area	Name	Level
Leasable		
1st Floor Level		
600 SF	Unit 101	1st Floor Level
722 SF	Unit 102	1st Floor Level
1322 SF TOTAL 1ST FLOOR LEASABLE AREA		

Unit Areas		
Area	Name	Level
2nd Floor		
830 SF	UNIT 201	2nd Floor
848 SF	UNIT 202	2nd Floor
830 SF	UNIT 203	2nd Floor
2509 SF TOTAL 2ND FLOOR LEASABLE AREA		

Unit Areas		
Area	Name	Level
3rd Floor		
830 SF	UNIT 301	3rd Floor
771 SF	UNIT 302	3rd Floor
772 SF	UNIT 303	3rd Floor
830 SF	UNIT 304	3rd Floor
3203 SF TOTAL 3RD FLOOR LEASABLE AREA		

Unit Areas		
Area	Name	Level
4th Floor		
832 SF	UNIT 401	4th Floor
771 SF	UNIT 402	4th Floor
772 SF	UNIT 403	4th Floor
830 SF	UNIT 404	4th Floor
3205 SF TOTAL 4TH FLOOR LEASABLE AREA		

Unit Areas		
Area	Name	Level
5th Floor		
832 SF	UNIT 501	5th Floor
771 SF	UNIT 502	5th Floor
772 SF	UNIT 503	5th Floor
830 SF	UNIT 504	5th Floor
3205 SF TOTAL 5TH FLOOR LEASABLE AREA		

Unit Areas		
Area	Name	Level
6th Floor		
830 SF	UNIT 601	6th Floor
1258 SF	UNIT 602	6th Floor
830 SF	UNIT 603	6th Floor
2918 SF TOTAL 6TH FLOOR LEASABLE AREA		

Unit Areas		
Area	Name	Level
7th Floor		
1362 SF	UNIT 701	7th Floor
952 SF	UNIT 702	7th Floor
2314 SF TOTAL 7TH FLOOR LEASABLE AREA		
18676 SF TOTAL LEASABLE AREA		
25353 SFTOTAL AREA		

PROJECT NAME
Bishop Allen @ Douglass

PROJECT ADDRESS
 BISHOP ALLEN DRIVE
 @ DOUGLASS STREET
 CAMBRIDGE, MA

CLIENT
FIRST CAMBRIDGE

ARCHITECT

**17 IVALOO STREET SUITE 400
 SOMERVILLE, MA 02143
 TELEPHONE: 617-591-8682**

CONSULTANTS:

LANDSCAPE:
VERDANT LANDSCAPE ARCHITECTURE
 318 HARVARD STREET SUITE 25
 BROOKLINE, MA 02446

CIVIL:
VTP ASSOCIATES, INC
 132 ADAMS STREET,
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Project number	18132
Date	2/18/2022
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Scale	1/16" = 1'-0"

REVISIONS

No.	Description	Date

Unit & Common Areas

A-026

Bishop Allen @ Douglass

\\TKG-SERVER\DR\1818132-FC-BAD-Douglass-Cambridge\03_Drawings\00_ARCH_S\DD18132-Bishop Allen Drive at Douglass Street-updated transformer.rvt 2/17/2022 10:14:30 AM

PROJECT NAME
Bishop Allen @ Douglass

PROJECT ADDRESS
 BISHOP ALLEN DRIVE
 @ DOUGLASS STREET
 CAMBRIDGE, MA

CLIENT
FIRST CAMBRIDGE

ARCHITECT

DESIGN

KHALSA

17 IVALOO STREET SUITE 400
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REGISTRATION

Project number 18132
 Date 2/18/2022
 Drawn by ERS
 Checked by JSK
 Scale As indicated

REVISIONS

No.	Description	Date

1st Floor Plan

A-101

Bishop Allen @ Douglass

FLOOD ELEVATION REQUIREMENTS:

Address: 48 Bishop Allen Dr	
Ground Elevation Min:	18.50 ft-CCB
Ground Elevation Max:	20.20 ft-CCB
2070- 100 Year- SLR/SS	N/A
2070- 100 Year- Precip	20.4
2070- 10 Year- SLR/SS	N/A
2070- 10 Year- Precip	19
2030- 100 Year- Precip	20.1
2030- 10 Year- Precip	N/A
Present Day - 100 Year	19.8
Present Day - 10 Year	N/A
FEMA 500 Year	N/A
FEMA 100 Year	N/A

Selected Map-Lot: 91-180
 Selected Address: 48 Bishop Allen Dr

[Link to Property Info](#)
 Zoom to

UTILITY COMPANY REQUIREMENTS FOR ALCOVE & ACCESS:

September 6, 2018

Requirements for Customer Alcove Containing Eversource Distribution Equipment

Alcove to be located on an outside wall of the customer building that is exposed to natural air circulation, and will continue to be exposed to natural air circulation after construction is complete. Alcove to be located such that any future customer construction or adjacent property construction will not restrict access or reduce the amount of natural air circulation.

Alcove size is dependent upon the number, type, and layout of equipment housed. All minimum clearances for unobstructed work space around equipment shall be maintained. A minimum unobstructed ceiling height of 15-feet is required. These minimum clearances may require increasing for adequate equipment cooling and access.

Padmount equipment shall be positioned within the alcove such that removal of any one piece of equipment will not require disturbing, relocating or removing another piece of equipment.

Padmount transformers and transducers to be set on a poured concrete housekeeping pad with the top surface 4-inches above the floor. Padmount switches, and primary metering enclosures to be set on the appropriate fiberglass base also installed with the top surface 4-inches above the floor.

Poured concrete floor and ceiling, with poured concrete or cement block walls, all having a 3 hour fire rating. Floors placed to drain storm water out and away from the alcove. Floors to be even with finished grade level.

One metal 36-inch wide, 80-inch tall, three hinge passage door that provides access directly to the outside at finished grade level. Door to open out or away from the alcove, have interior panic opening hardware and exterior lock keyed to Eversource "M" standard.

Locking overhead metal "screen" roll up door(s) or hinged metal gate(s) that provide access directly to the outside at finished grade level. Door(s) and gate(s) must be sized and located to allow unrestricted installation, maintenance, and removal of equipment without altering any building structure or trim, and provide adequate natural ventilation. **The minimum door or gate opening height is 15-feet, and minimum opening width is 10-feet.**

Interior lighting required, with control switch(es) located inside the alcove adjacent to and accessible from the passage door when open.

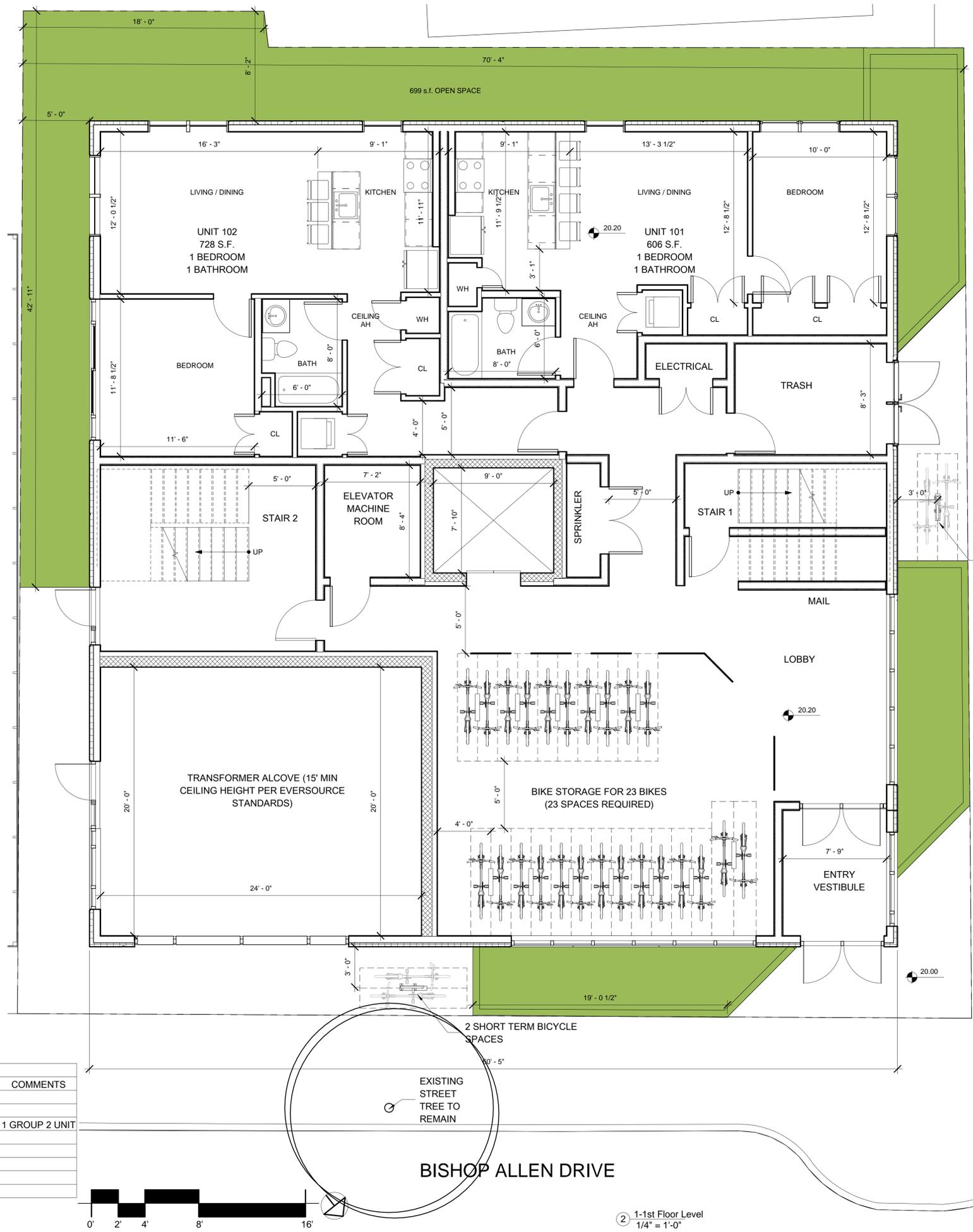
No foreign systems, or storage of any type allowed within the alcove.

Customer to own, clean, re-lamp and maintain the alcove, and the associated lighting and its electric source and control, passage and equipment doors and gates and their related locking, opening and operating systems.

Customer to provide Eversource a scale drawing of alcove for approval **prior to construction**. Drawing to include dimensions, clearances, lighting, door and gate openings, and the footprint(s) and orientation(s) of all required distribution equipment housed.

CITY OF CAMBRIDGE PARKING LOT

DOUGLASS STREET



UNIT BREAKDOWN BY FLOOR

FLOOR	1 BED / 1 BATH	2 BED / 1 BATH	2 + BED / 2 BATH	2 BED / 2 BATH	3 BED / 2 BATH	TOTAL UNITS	COMMENTS
1	2	0	0	0	0	2	
2	0	2	1	0	0	3	
3	0	4	0	0	0	4	1 GROUP 2 UNIT
4	0	4	0	0	0	4	
5	0	4	0	0	0	4	
6	0	2	0	0	1	3	
7	0	0	0	1	1	2	
TOTAL	2	16	1	1	2	22	
	TOTAL 1 BED	TOTAL 2 BED	TOTAL 3 BED				
	2	18	2				



② 1-1st Floor Level
 1/4" = 1'-0"

\\TKG-SERVER\DRG\1818132-FC-BAD-Douglass-Cambridge\03_Drawings\01_ARCH_S\DD18132-Bishop Allen Drive at Douglass Street-updated transformer.rvt

2/17/2022 10:14:38 AM

PROJECT NAME
Bishop Allen @ Douglass

PROJECT ADDRESS
 BISHOP ALLEN DRIVE
 @ DOUGLASS STREET
 CAMBRIDGE, MA

CLIENT
FIRST CAMBRIDGE

ARCHITECT



KHALSA

17 IVALOO STREET SUITE 400
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CONSULTANTS:

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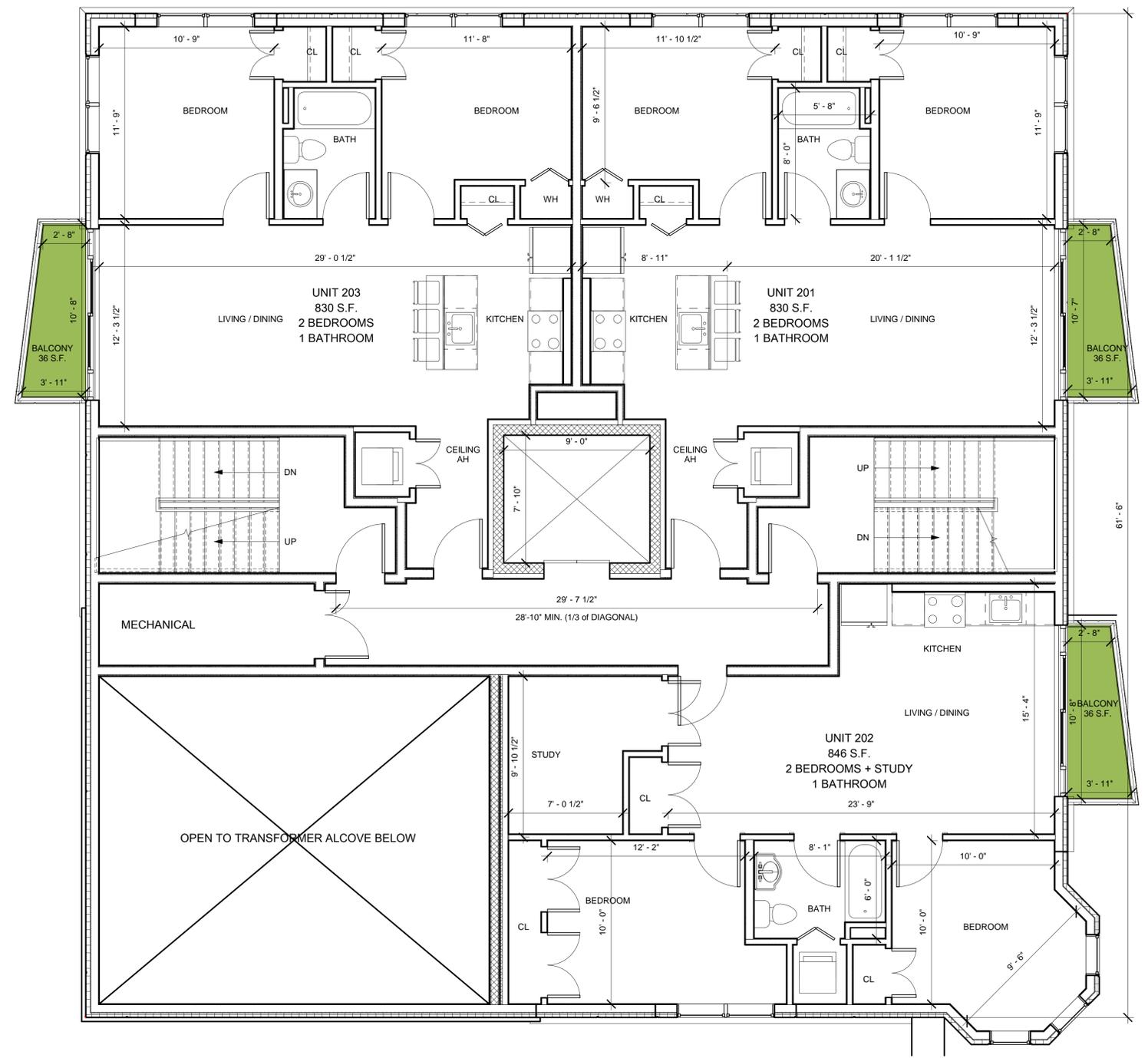
Project number 18132
 Date 2/18/2022
 Drawn by ERS
 Checked by JSK
 Scale As indicated

REVISIONS

No.	Description	Date

2nd Floor Plan

A-102
 Bishop Allen @ Douglass



① 2nd Floor
 1/4" = 1'-0"

UNIT BREAKDOWN BY FLOOR

FLOOR	1 BED / 1 BATH	2 BED / 1 BATH	2 + BED / 2 BATH	2 BED / 2 BATH	3 BED / 2 BATH	TOTAL UNITS	COMMENTS
1	2	0	0	0	0	2	
2	0	2	1	0	0	3	
3	0	4	0	0	0	4	1 GROUP 2 UNIT
4	0	4	0	0	0	4	
5	0	4	0	0	0	4	
6	0	2	0	0	1	3	
7	0	0	0	1	1	2	
TOTAL	2	16	1	1	2	22	
	TOTAL 1 BED		TOTAL 2 BED		TOTAL 3 BED		
	2		18		2		



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PROJECT NAME

**Bishop Allen @
Douglass**

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@ DOUGLASS STREET
CAMBRIDGE, MA

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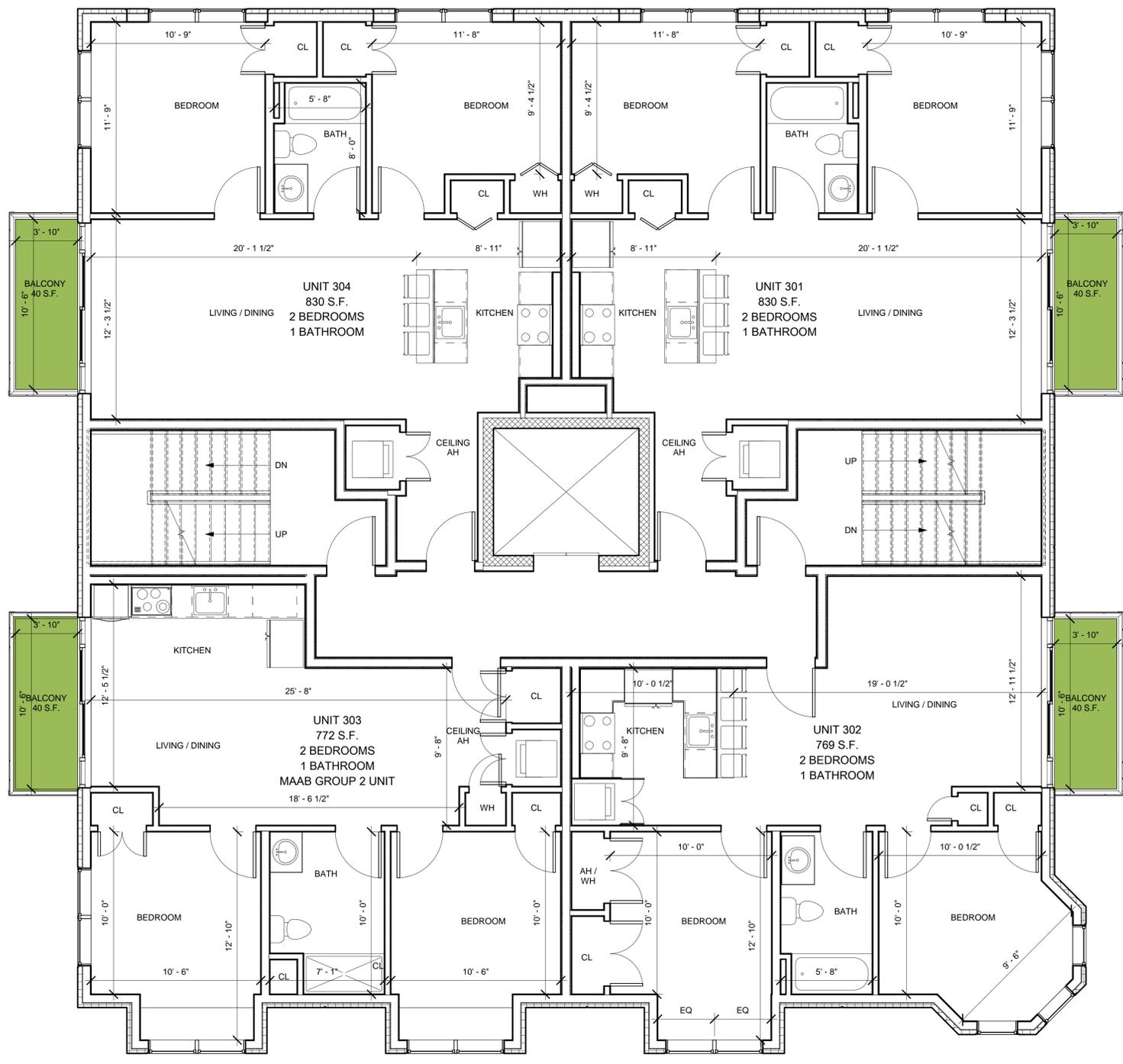
Project number 18132
Date 2/18/2022
Drawn by ERS
Checked by JSK
Scale As indicated

REVISIONS

No.	Description	Date

3rd Floor Plan

A-103
Bishop Allen @ Douglass



① 3-3rd Floor Level
1/4" = 1'-0"

UNIT BREAKDOWN BY FLOOR							TOTAL UNITS	COMMENTS
FLOOR	1 BED / 1 BATH	2 BED / 1 BATH	2 + BED / 2 BATH	2 BED / 2 BATH	3 BED / 2 BATH			
1	2	0	0	0	0	2		
2	0	2	1	0	0	3		
3	0	4	0	0	0	4	1 GROUP 2 UNIT	
4	0	4	0	0	0	4		
5	0	4	0	0	0	4		
6	0	2	0	0	1	3		
7	0	0	0	1	1	2		
TOTAL	2	16	1	1	2	22		
	TOTAL 1 BED		TOTAL 2 BED		TOTAL 3 BED			
	2		18		2			



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PROJECT NAME
Bishop Allen @ Douglass

PROJECT ADDRESS
 BISHOP ALLEN DRIVE
 @ DOUGLASS STREET
 CAMBRIDGE, MA

CLIENT
FIRST CAMBRIDGE



17 IVALOO STREET SUITE 400
 SOMERVILLE, MA 02143
 TELEPHONE: 617-591-8682

CONSULTANTS:

LANDSCAPE:
VERDANT LANDSCAPE ARCHITECTURE
 318 HARVARD STREET SUITE 25
 BROOKLINE, MA 02446

CIVIL:
VTP ASSOCIATES, INC
 132 ADAMS STREET,
 2ND FLOOR SUITE 3
 NEWTON, MA 02458

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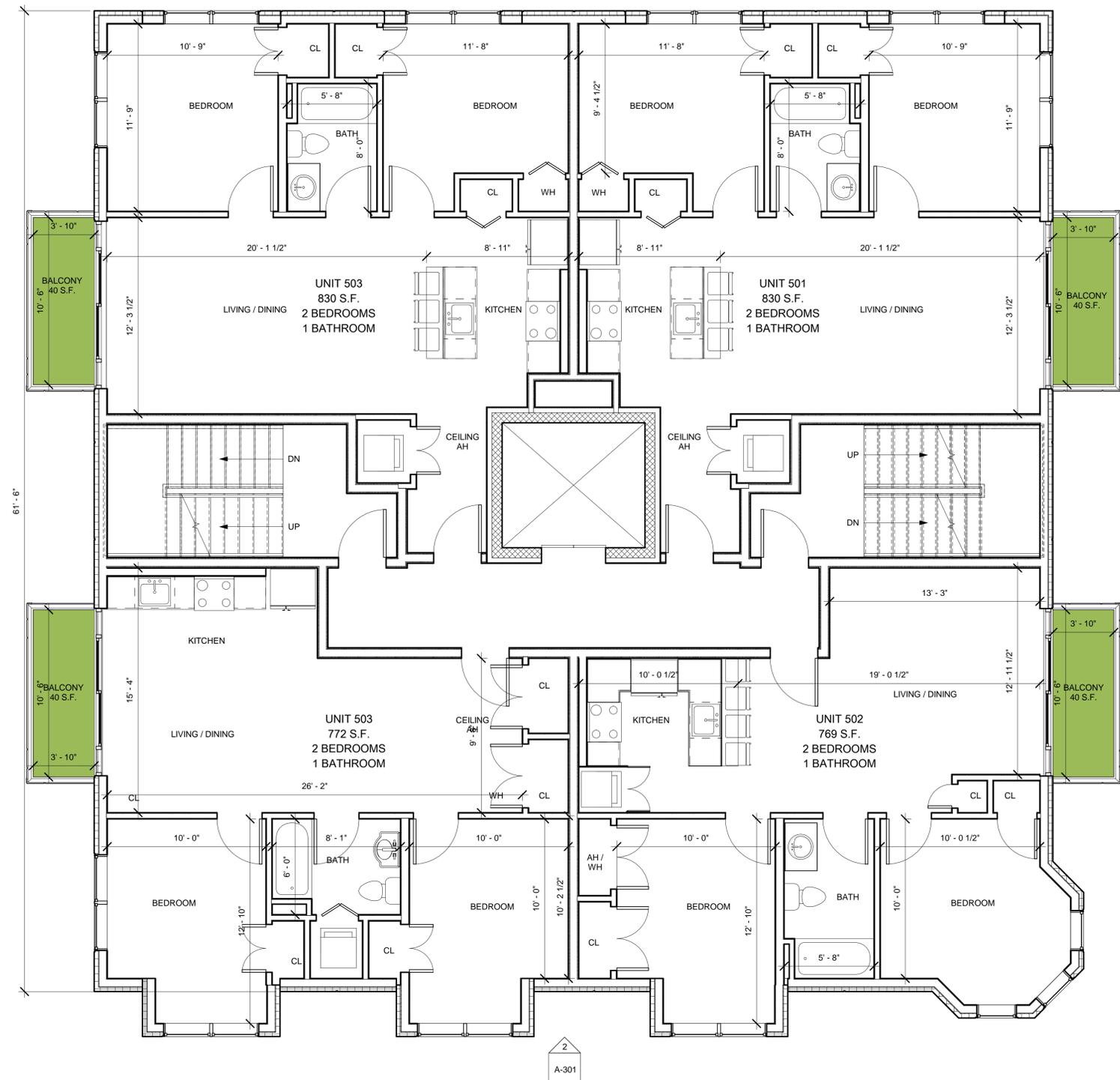
Project number 18132
 Date 2/18/2022
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 Scale As indicated

REVISIONS

No.	Description	Date

4th & 5th Floor Plans

A-104
 Bishop Allen @ Douglass



① 5-5th Floor
 1/4" = 1'-0"

UNIT BREAKDOWN BY FLOOR

FLOOR	1 BED / 1 BATH	2 BED / 1 BATH	2 + BED / 2 BATH	2 BED / 2 BATH	3 BED / 2 BATH	TOTAL UNITS	COMMENTS
1	2	0	0	0	0	2	
2	0	2	1	0	0	3	
3	0	4	0	0	0	4	1 GROUP 2 UNIT
4	0	4	0	0	0	4	
5	0	4	0	0	0	4	
6	0	2	0	0	1	3	
7	0	0	0	1	1	2	
TOTAL	2	16	1	1	2	22	
	TOTAL 1 BED		TOTAL 2 BED		TOTAL 3 BED		
	2		18		2		



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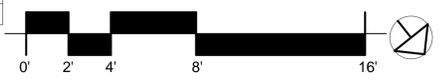
6th Floor Plan

A-105
 Bishop Allen @ Douglass



UNIT BREAKDOWN BY FLOOR

FLOOR	1 BED / 1 BATH	2 BED / 1 BATH	2 + BED / 2 BATH	2 BED / 2 BATH	3 BED / 2 BATH	TOTAL UNITS	COMMENTS
1	2	0	0	0	0	2	
2	0	2	1	0	0	3	
3	0	4	0	0	0	4	1 GROUP 2 UNIT
4	0	4	0	0	0	4	
5	0	4	0	0	0	4	
6	0	2	0	0	1	3	
7	0	0	0	1	1	2	
TOTAL	2	16	1	1	2	22	
	TOTAL 1 BED		TOTAL 2 BED		TOTAL 3 BED		
	2		18		2		



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PROJECT NAME

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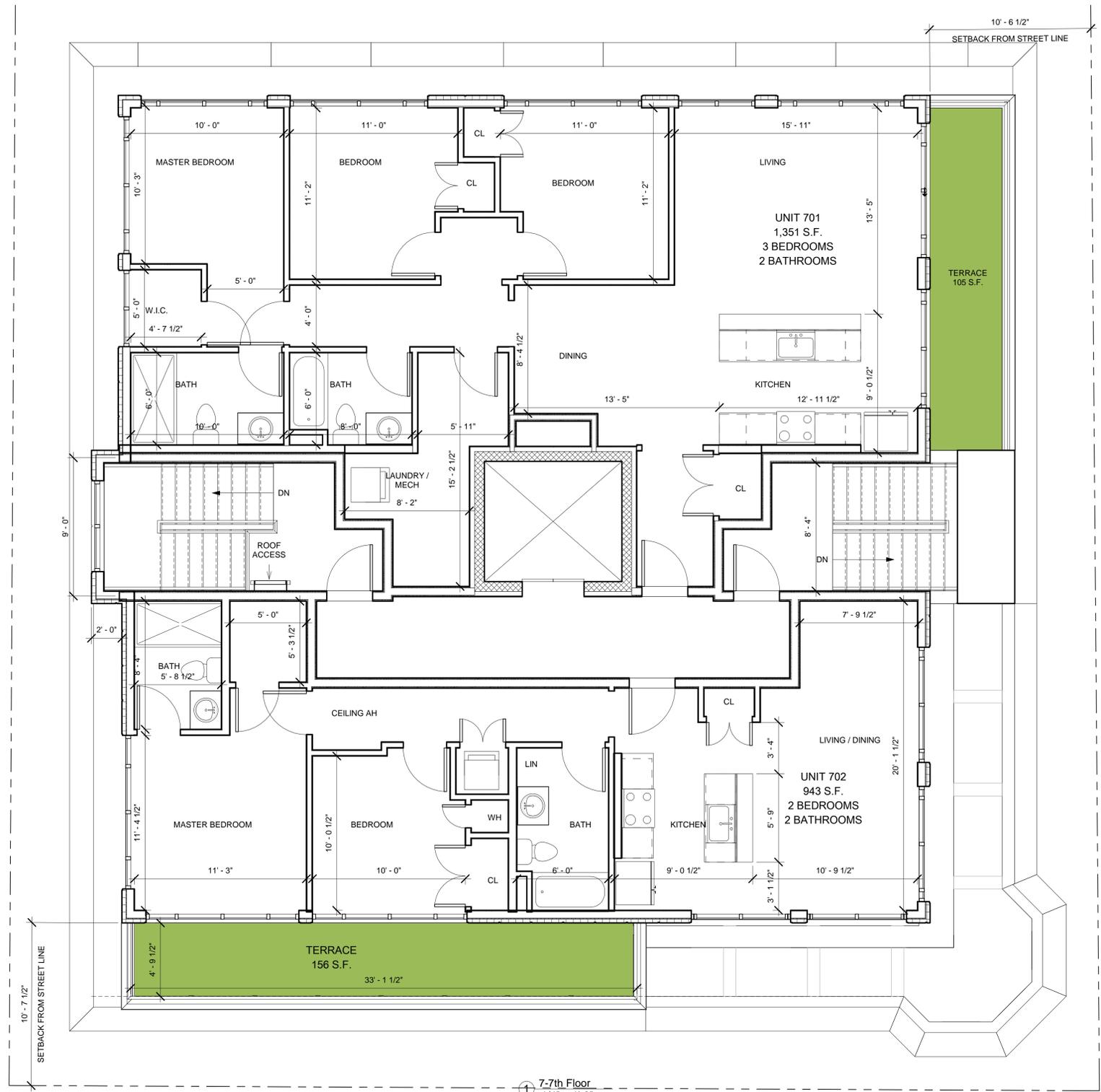
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REVISIONS

No.	Description	Date

7th Floor Plan

A-106
Bishop Allen @ Douglass



7-7th Floor
1/4" = 1'-0"

FLOOR	UNIT BREAKDOWN BY FLOOR						TOTAL UNITS	COMMENTS
	1 BED / 1 BATH	2 BED / 1 BATH	2 + BED / 2 BATH	2 BED / 2 BATH	3 BED / 2 BATH	3 BED / 3 BATH		
1	2	0	0	0	0	0	2	
2	0	2	1	0	0	0	3	
3	0	4	0	0	0	0	4	1 GROUP 2 UNIT
4	0	4	0	0	0	0	4	
5	0	4	0	0	0	0	4	
6	0	2	0	0	1	1	3	
7	0	0	0	1	1	1	2	
TOTAL	2	16	1	1	2	2	22	
	TOTAL 1 BED		TOTAL 2 BED		TOTAL 3 BED			
	2		18		2			



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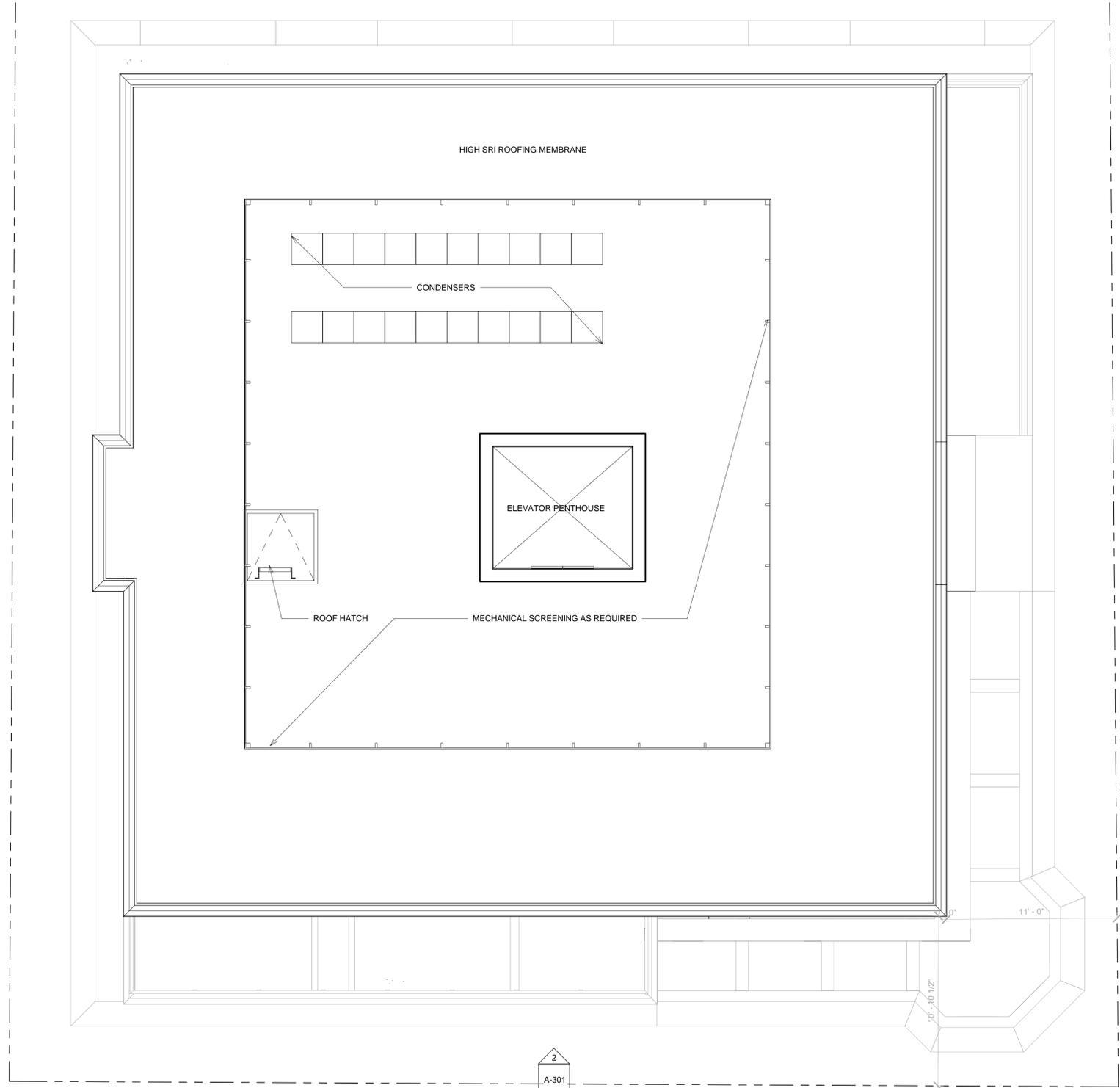
REVISIONS

No.	Description	Date

Roof Floor Plan

A-107

Bishop Allen @ Douglass



① 8-Roof
1/4" = 1'-0"

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Scale 1/8" = 1'-0"

REVISIONS

No.	Description	Date

Elevations

A-300

Bishop Allen @ Douglass



② DOUGLASS STREET ELEVATION
1/8" = 1'-0"

CENTRAL SQUARE OVERLAY DISTRICT: MAXIMUM HEIGHT PER 20.304.2 (W/SPECIAL PERMIT) 80' MAX. ANY PORTION OVER 60' MUST BE SET BACK FROM THE STREET LINE AT LEAST 10' AND THOSE PORTIONS ARE ALSO SET BACK FROM ON OR MORE 45 DEGREE BULK CONTROL PLANES BEGINNING 60' ABOVE ANY STREETLINE IN THE DISTRICT AND RISING OVER ONE OR MORE LOTS AT A 45 DEGREE ANGLE



① Bishop Allen Drive Elevation
1/8" = 1'-0"



③ LEFT SIDE ELEVATION
1/8" = 1'-0"



④ Right Side Elevation
1/8" = 1'-0"

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PROJECT NAME

Bishop Allen @ Douglass

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@ DOUGLASS STREET
CAMBRIDGE, MA

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FIRST CAMBRIDGE

ARCHITECT



17 IVALOO STREET SUITE 400
SOMERVILLE, MA 02143
TELEPHONE: 617-591-8682

CONSULTANTS:

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Scale 1/8" = 1'-0"

REVISIONS

No.	Description	Date

Street Elevations

A-301

Bishop Allen @ Douglass



① Existing Bishop Allen Drive Elevation
1/8" = 1'-0"

② Proposed Bishop Allen Drive Elevation
1/8" = 1'-0"

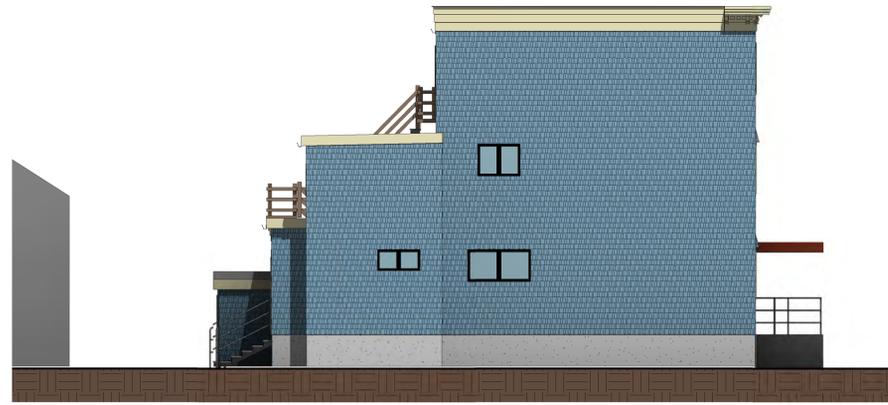


③ Existing Douglass Street Elevation
1/8" = 1'-0"

④ Proposed Douglass Street Elevation
1/8" = 1'-0"

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2/17/2022 10:17:00 AM



① Existing Left Side Elevation
1/8" = 1'-0"



② Proposed Left Side Elevation
1/8" = 1'-0"



③ Existing Right Side Elevation
1/8" = 1'-0"



④ Proposed Right Side Elevation
1/8" = 1'-0"

PROJECT NAME

**Bishop Allen @
Douglass**

PROJECT ADDRESS
BISHOP ALLEN DRIVE
@ DOUGLASS STREET
CAMBRIDGE, MA

CLIENT

FIRST CAMBRIDGE

ARCHITECT



17 IVALOO STREET SUITE 400
SOMERVILLE, MA 02143
TELEPHONE: 617-591-8682

CONSULTANTS:

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ARCHITECTURE**
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BROOKLINE, MA 02446

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Date 2/18/2022
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REVISIONS

No.	Description	Date

Side Elevations

A-302

Bishop Allen @ Douglass

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PROJECT NAME

Bishop Allen @ Douglass

PROJECT ADDRESS
BISHOP ALLEN DRIVE
@ DOUGLASS STREET
CAMBRIDGE, MA

CLIENT

FIRST CAMBRIDGE

ARCHITECT



KHALSA

17 IVALOO STREET SUITE 400
SOMERVILLE, MA 02143
TELEPHONE: 617-591-8682

CONSULTANTS:

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VERDANT LANDSCAPE ARCHITECTURE
318 HARVARD STREET SUITE 25
BROOKLINE, MA 02446

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132 ADAMS STREET,
2ND FLOOR SUITE 3
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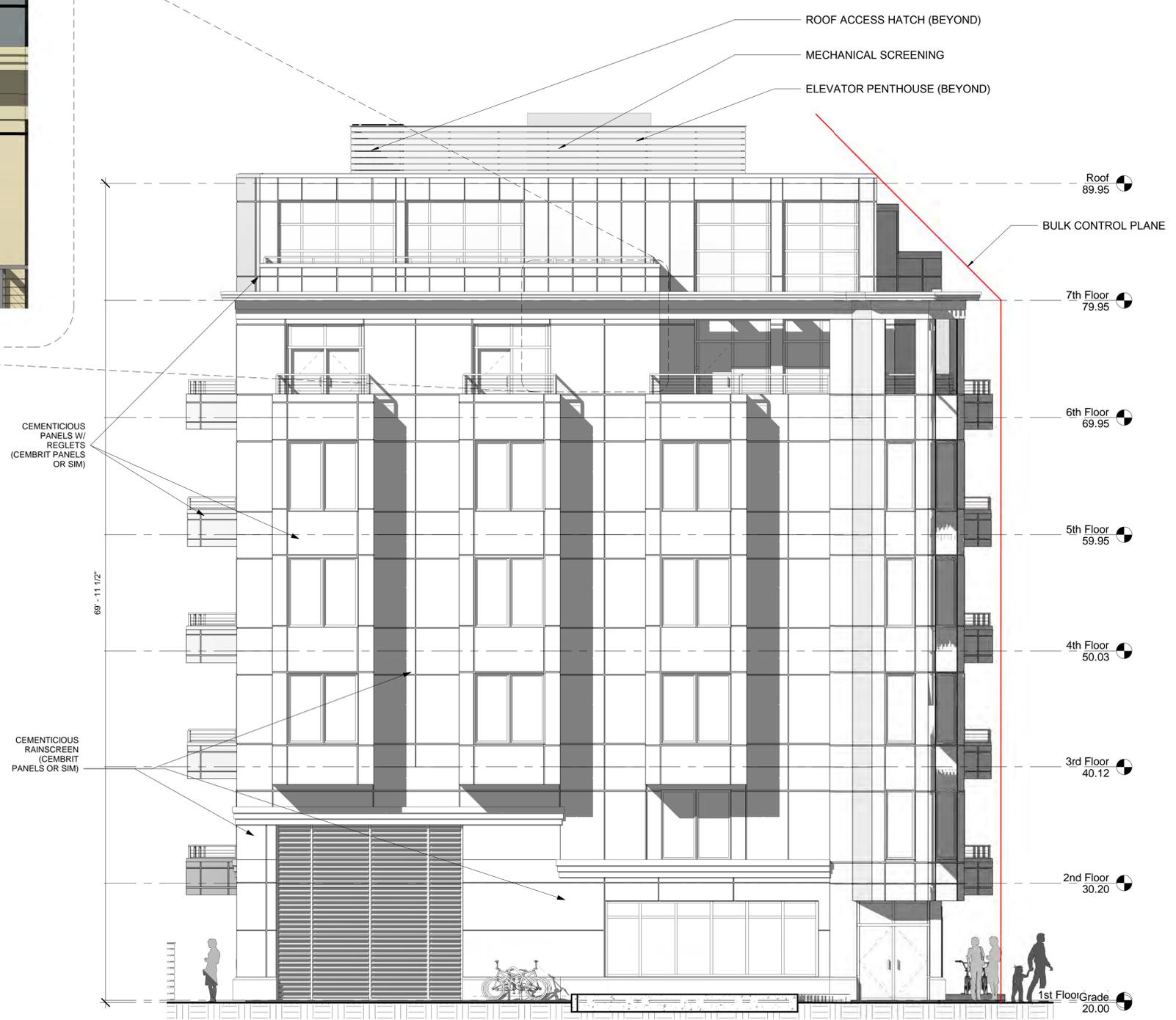
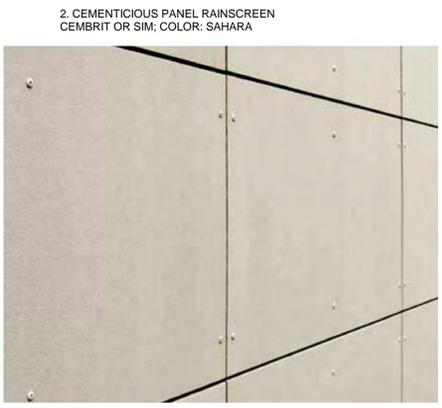
REVISIONS

No.	Description	Date

Bishop Allen Drive Elevation

A-320

Bishop Allen @ Douglass



1 Bishop Allen Drive Elevation Copy 1
3/16" = 1'-0"

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FRONT LEFT SIDE OF BUILDING (BISHOP ALLEN DRIVE)



FRONT OF 50 BISHOP ALLEN DRIVE



RIGHT SIDE OF BUILDING (DOUGLASS ST)

PROJECT NAME

**Bishop Allen @
Douglass**

PROJECT ADDRESS
BISHOP ALLEN DRIVE
@ DOUGLASS STREET
CAMBRIDGE, MA

CLIENT

FIRST CAMBRIDGE

ARCHITECT



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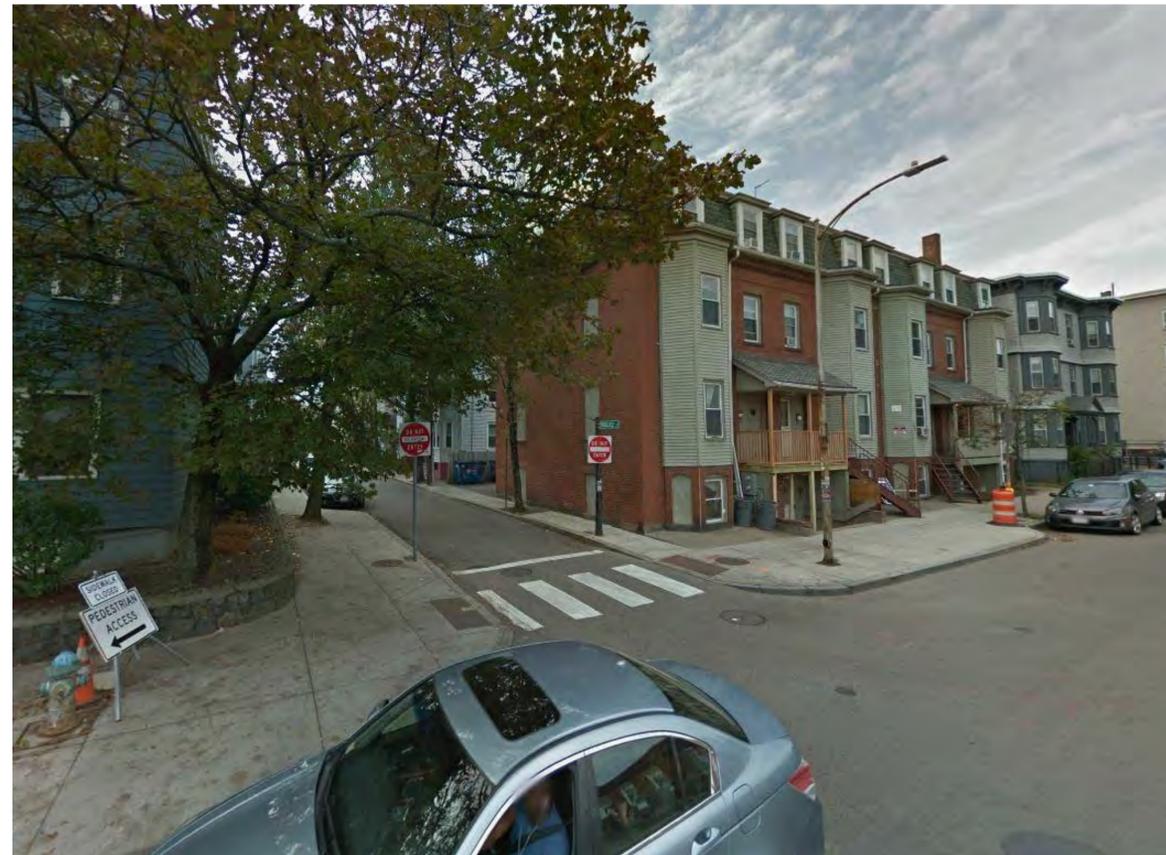
No.	Description	Date

Neighborhood
Photos

AV-1A
Bishop Allen @ Douglass



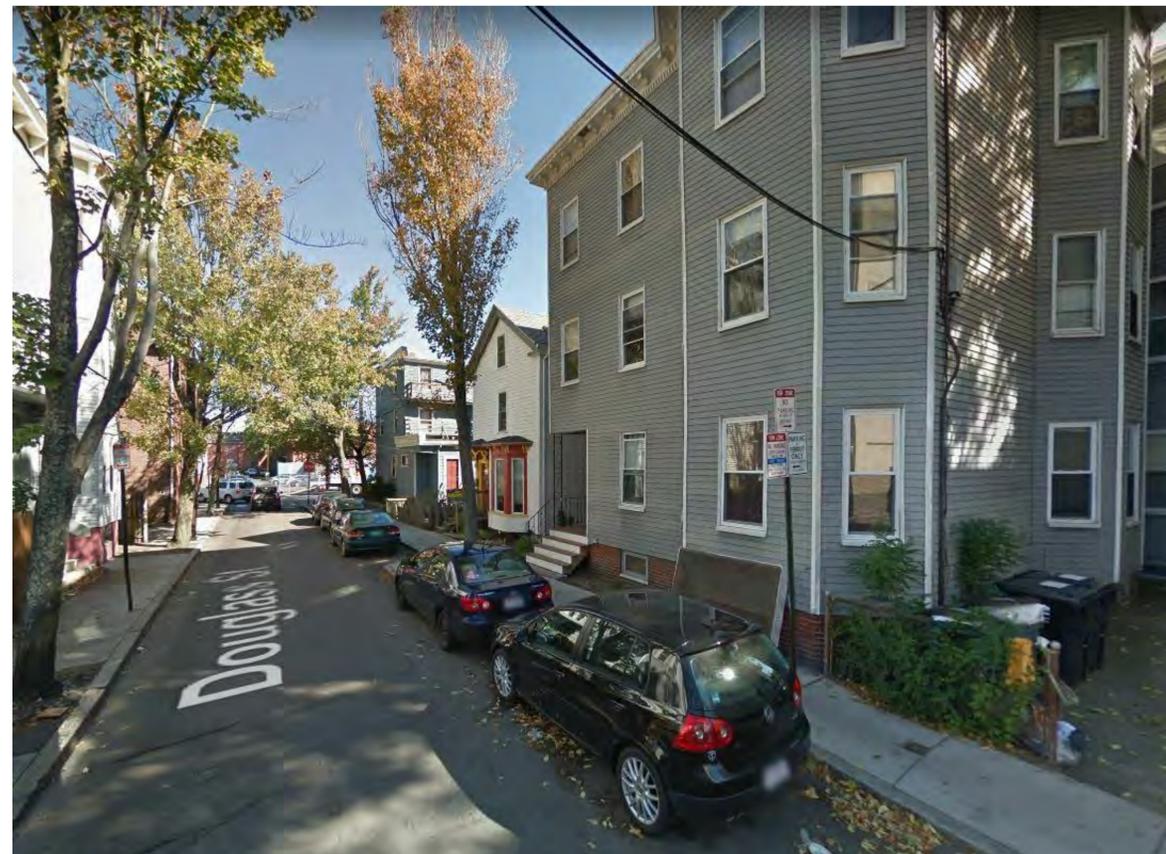
1. VIEW OF SITE



2. VIEW TO RIGHT OF SITE



4. VIEW UP BISHOP ALLEN DRIVE (BETWEEN DOUGLASS & NORFOLK STREETS)



5. VIEW UP DOUGLASS ST (TOWARD BISHOP ALLEN DR)

PROJECT NAME
**Bishop Allen @
 Douglass**

PROJECT ADDRESS
 BISHOP ALLEN DRIVE
 @ DOUGLASS STREET
 CAMBRIDGE, MA

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ARCHITECT

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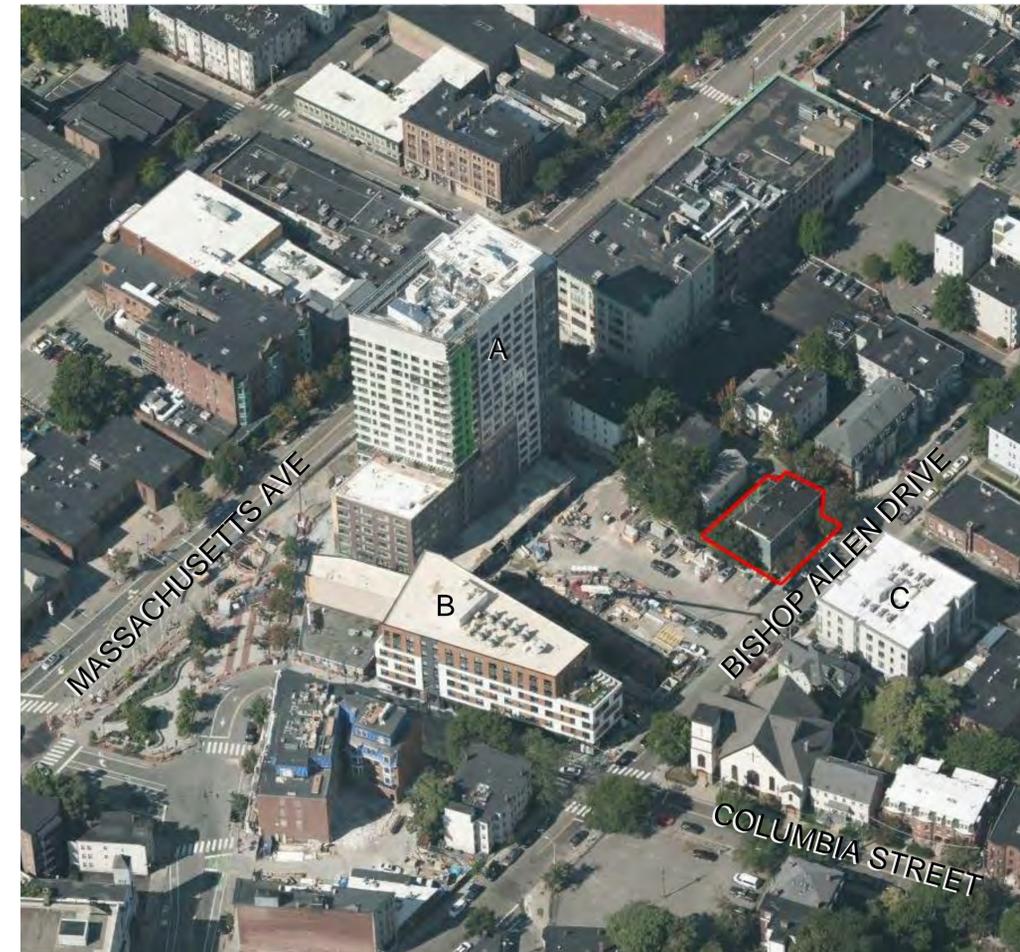
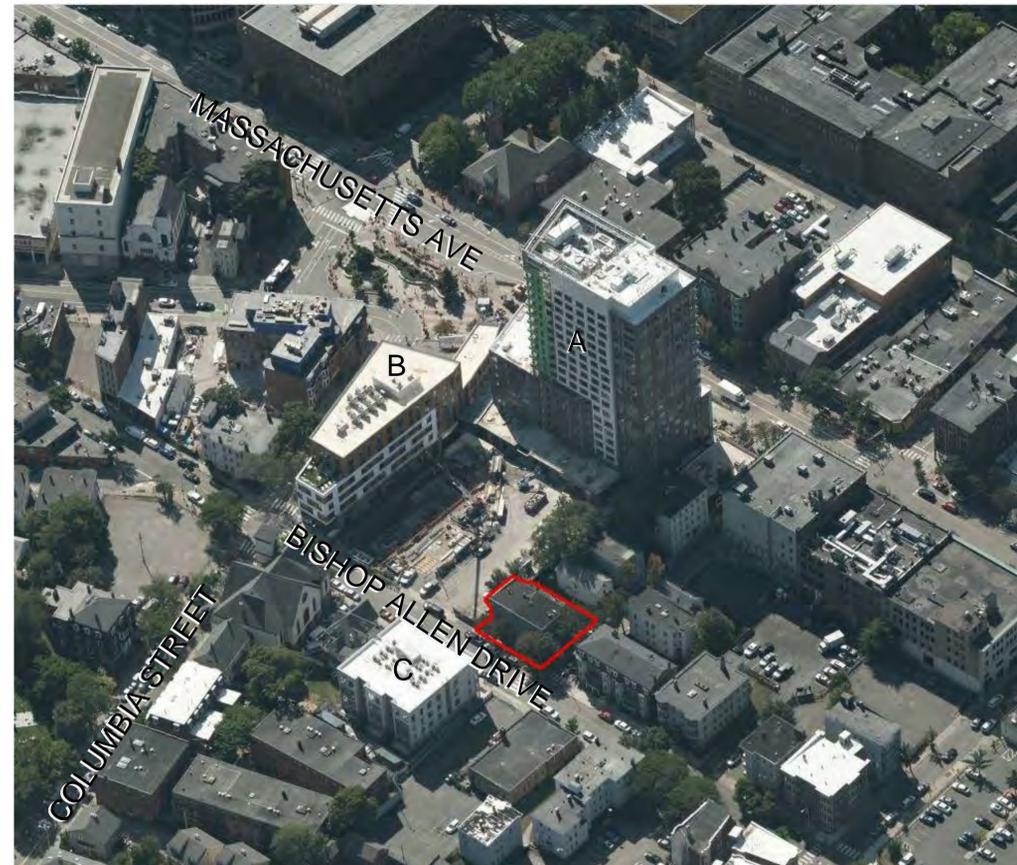
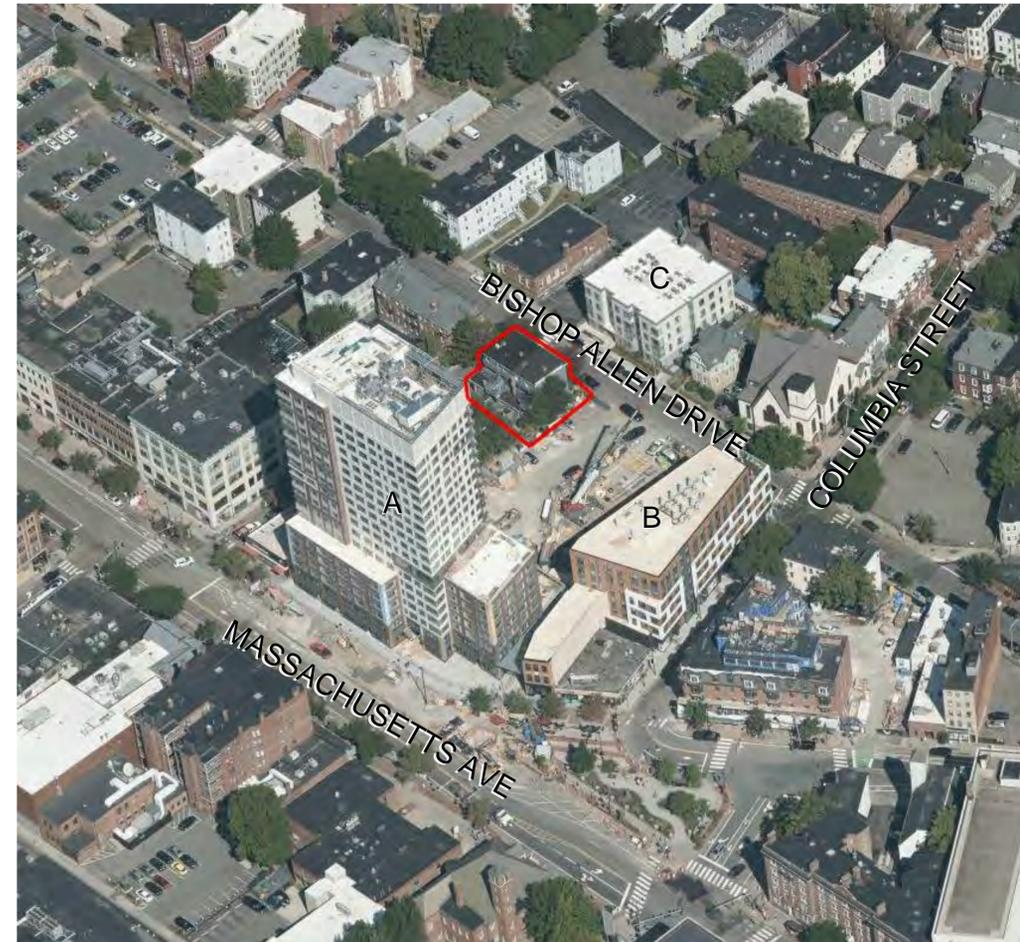
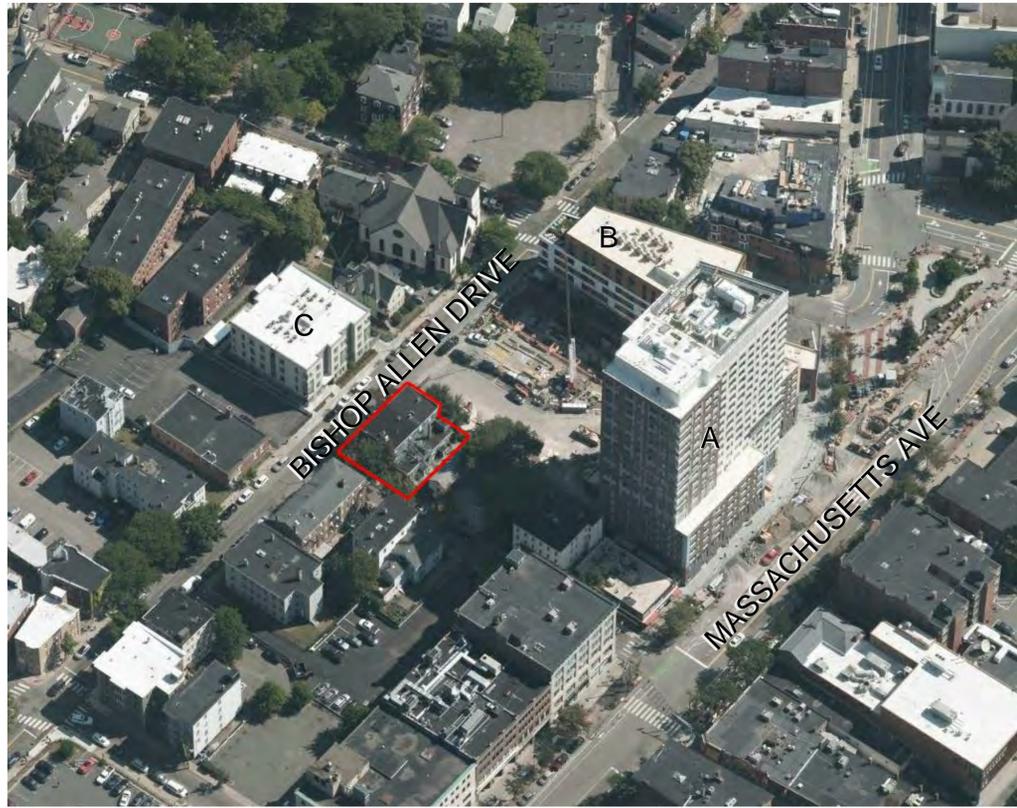
Neighborhood
 Photos

AV-1B
 Bishop Allen @ Douglass

A:
PRIMARY MARKET CENTRAL
STRUCTURE: 195'

B:
(CORNER OF BISHOP ALLEN
DRIVE & COLUMBIA
STREET): 70'

C: 57 BISHOP ALLEN DRIVE
AKA UNION HOUSE
APARTMENTS: 45'



PROJECT NAME

**Bishop Allen @
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BISHOP ALLEN DRIVE
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Neighborhood
Photos

AV-1C

Bishop Allen @ Douglass



NEW BUILDING OPPOSITE OF SITE



NEW BUILDING ON OPPOSITE CORNER

SITE

PROJECT NAME

**Bishop Allen @
Douglass**

PROJECT ADDRESS
BISHOP ALLEN DRIVE
@ DOUGLASS STREET
CAMBRIDGE, MA

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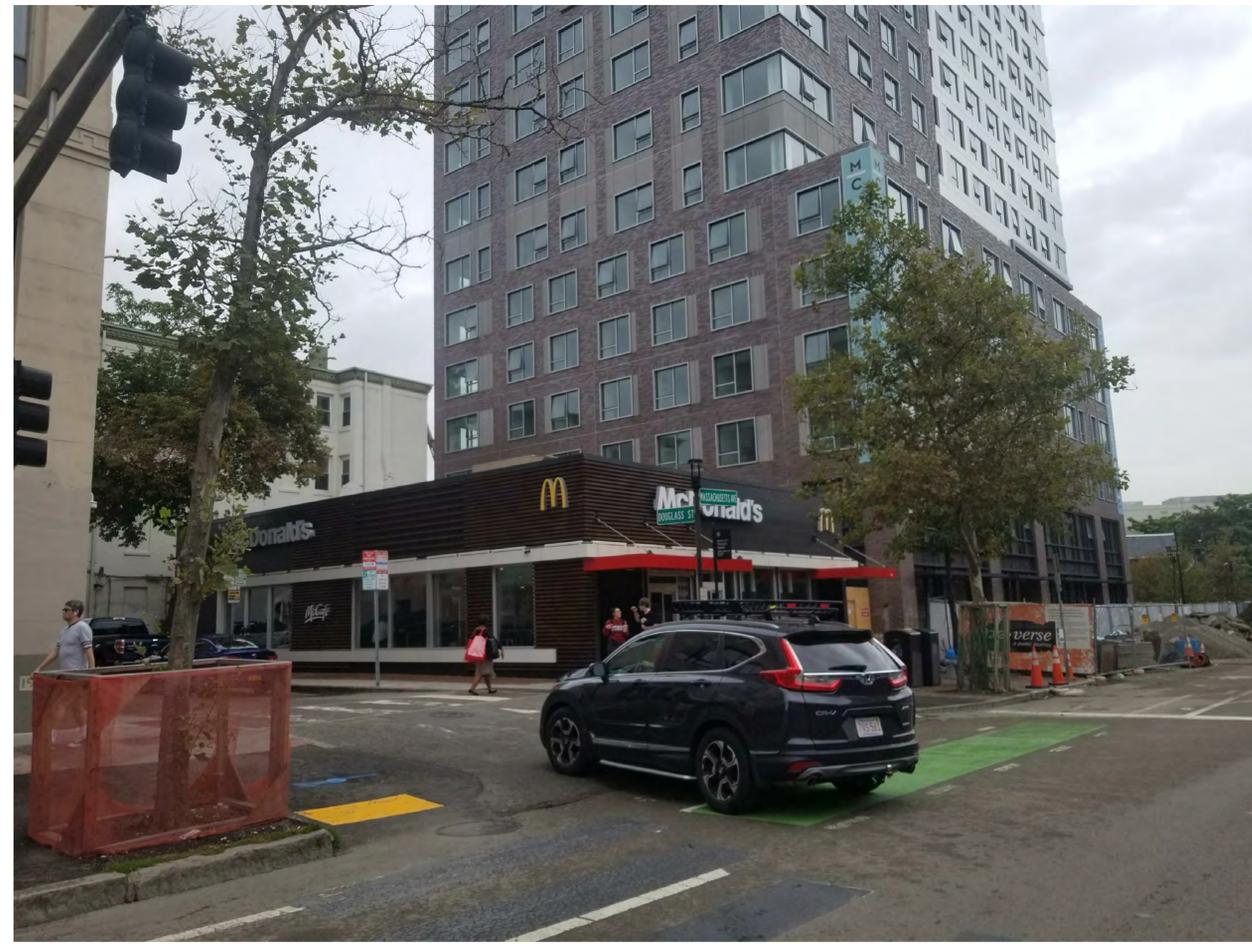
Neighborhood
Photos

AV-1D

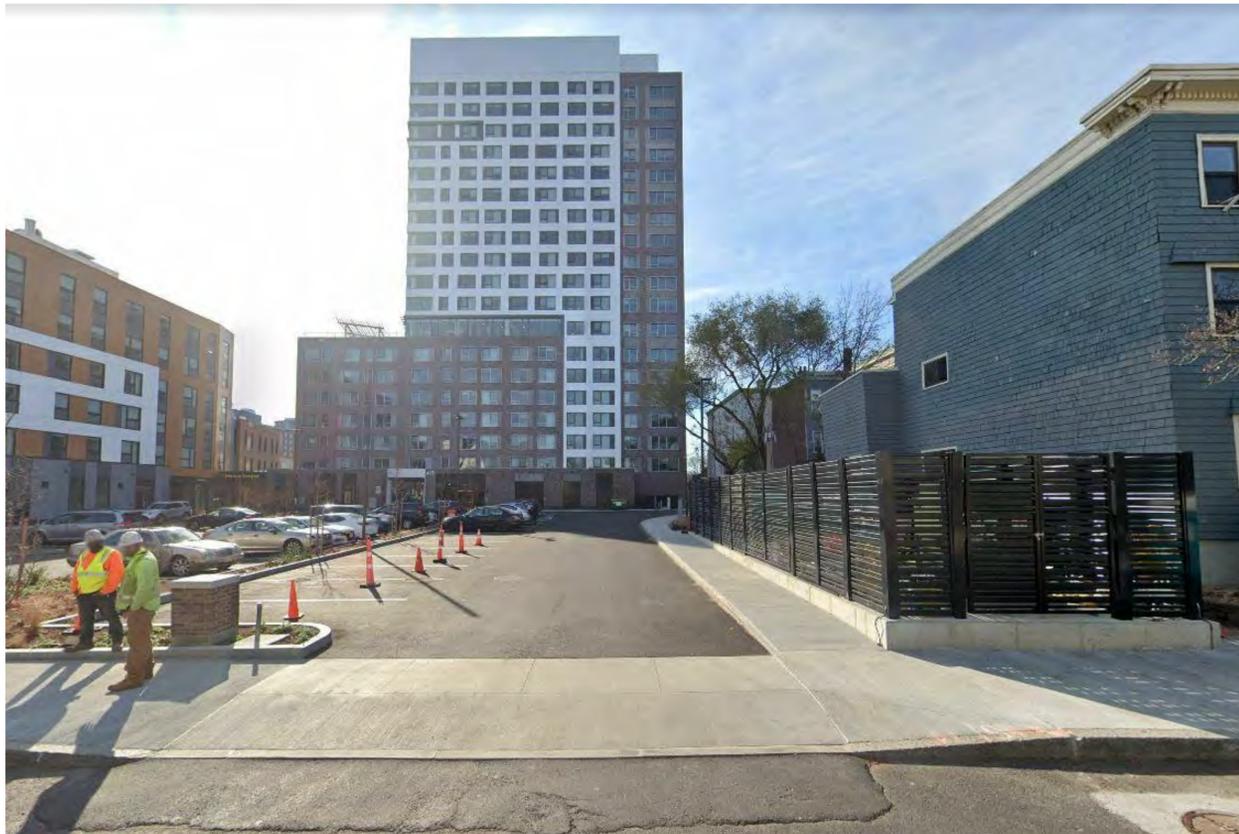
Bishop Allen @ Douglass



MARKET CENTRAL PROJECT FROM MASSACHUSETTS AVENUE AT SIDNEY ST



MARKET CENTRAL PROJECT FROM MASSACHUSETTS AVENUE AT BROOKLINE ST



MARKET CENTRAL PROJECT FROM BISHOP ALLEN DRIVE



10 ESSEX ST

PROJECT NAME

**Bishop Allen @
Douglass**

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@ DOUGLASS STREET
CAMBRIDGE, MA

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Scale

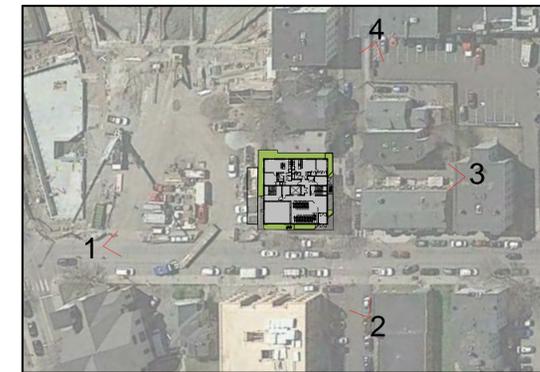
REVISIONS

No.	Description	Date

Neighborhood
Photos

AV-1E

Bishop Allen @ Douglass



PROJECT NAME
Bishop Allen @ Douglass

PROJECT ADDRESS
 BISHOP ALLEN DRIVE
 @ DOUGLASS STREET
 CAMBRIDGE, MA

CLIENT
FIRST CAMBRIDGE

ARCHITECT

KHALSA

17 IVALOO STREET SUITE 400
 SOMERVILLE, MA 02143
 TELEPHONE: 617-591-8682

CONSULTANTS:

LANDSCAPE:
VERDANT LANDSCAPE ARCHITECTURE
 318 HARVARD STREET SUITE 25
 BROOKLINE, MA 02446

CIVIL:
VTP ASSOCIATES, INC
 132 ADAMS STREET,
 2ND FLOOR SUITE 3
 NEWTON, MA 02458

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 Scale 1" = 80'-0"

REVISIONS

No.	Description	Date

Perspectives

AV-2

Bishop Allen @ Douglass

1. VIEW LOOKING UP BISHOP ALLEN DRIVE



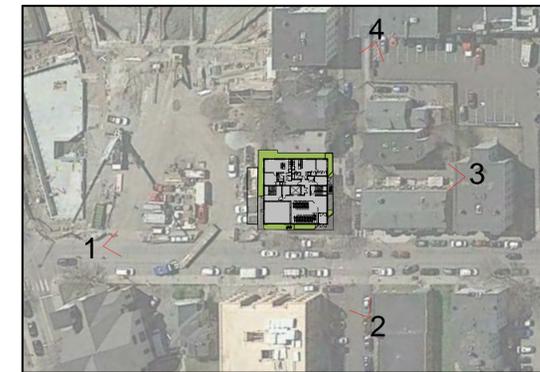
2. VIEW OPPOSITE LEFT OF SITE LOOKING TOWARD DOUGLASS ST



3. VIEW TOWARD DOUGLASS ST FACADE



4. VIEW FROM MASSACHUSETTS AVENUE LOOKING TOWARDS BISHOP ALLEN DR



PROJECT NAME
Bishop Allen @ Douglass

PROJECT ADDRESS
 BISHOP ALLEN DRIVE @ DOUGLASS STREET
 CAMBRIDGE, MA

CLIENT
FIRST CAMBRIDGE

ARCHITECT

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REVISIONS

No.	Description	Date

Existing Perspectives

AV-2A

Bishop Allen @ Douglass

1. VIEW LOOKING UP BISHIP ALLEN DRIVE



2. VIEW OPPOSITE LEFT OF SITE LOOKING TOWARD DOUGLASS ST



3. VIEW TOWARD DOUGLASS ST FACADE



4. VIEW FROM MASSACHUSETTS AVENUE LOOKING TOWARDS BISHOP ALLEN DR



PROJECT NAME
**Bishop Allen @
 Douglass**

PROJECT ADDRESS
 BISHOP ALLEN DRIVE
 @ DOUGLASS STREET
 CAMBRIDGE, MA

CLIENT
FIRST CAMBRIDGE

ARCHITECT



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 Scale 1" = 50'-0"

REVISIONS

No.	Description	Date

Rendering 1

AV-3

Bishop Allen @ Douglass





PROJECT NAME

**Bishop Allen @
Douglass**

PROJECT ADDRESS
BISHOP ALLEN DRIVE
@ DOUGLASS STREET
CAMBRIDGE, MA

CLIENT

FIRST CAMBRIDGE

ARCHITECT



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REGISTRATION



Project number 18132
Date 2/18/2022
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Scale 1" = 50'-0"

REVISIONS

No.	Description	Date

Rendering 1 -
Existing

AV-3A
Bishop Allen @ Douglass





PROJECT NAME

**Bishop Allen @
Douglass**

PROJECT ADDRESS
BISHOP ALLEN DRIVE
@ DOUGLASS STREET
CAMBRIDGE, MA

CLIENT

FIRST CAMBRIDGE

ARCHITECT



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Project number 18132
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REVISIONS

No.	Description	Date

Rendering 2

AV-4
Bishop Allen @ Douglass





PROJECT NAME

**Bishop Allen @
Douglass**

PROJECT ADDRESS
BISHOP ALLEN DRIVE
@ DOUGLASS STREET
CAMBRIDGE, MA

CLIENT

FIRST CAMBRIDGE

ARCHITECT



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REVISIONS

No.	Description	Date

Rendering 2 -
Existing

AV-4A

Bishop Allen @ Douglass





PROJECT NAME

**Bishop Allen @
Douglass**

PROJECT ADDRESS
BISHOP ALLEN DRIVE
@ DOUGLASS STREET
CAMBRIDGE, MA

CLIENT

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ARCHITECT



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REGISTRATION



Project number 18132
Date 2/18/2022
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Scale 1" = 50'-0"

REVISIONS

No.	Description	Date

Rendering 3

AV-5

Bishop Allen @ Douglass



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PROJECT NAME

**Bishop Allen @
Douglass**

PROJECT ADDRESS
BISHOP ALLEN DRIVE
@ DOUGLASS STREET
CAMBRIDGE, MA

CLIENT

FIRST CAMBRIDGE

ARCHITECT



17 IVALOO STREET SUITE 400
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CONSULTANTS:

LANDSCAPE:
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REGISTRATION



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Date	2/18/2022
Drawn by	ERS
Checked by	JSK
Scale	1" = 50'-0"

REVISIONS

No.	Description	Date

Rendering 3 -
Existing

AV-5A
Bishop Allen @ Douglass



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MEMORANDUM

TO: Mr. Ben Deb
First Cambridge Realty Corporation
907 Massachusetts Avenue
Cambridge, MA 02139

FROM: F. Giles Ham, P.E. *and*
Derek Roach E.I.T.
Vanasse & Associates, Inc.
35 New England Business Center Drive
Suite 140
Andover, MA 01810
(978) 474-8800

DATE: September 8, 2020

RE: 8419

SUBJECT: Parking and Traffic Assessment - Proposed Residential Development
50 Bishop Allen Drive, Cambridge, Massachusetts

Vanasse & Associates, Inc. (VAI) has completed a Parking and Traffic Assessment of a proposed 22-unit residential development to be located at 50 Bishop Allen Drive in Cambridge, Massachusetts (Project). The site currently accommodates 11 units. Contained within this memorandum is a parking supply and demand analysis, estimated trip generation by mode split, and a recommended Travel Demand Management (TDM) plan.

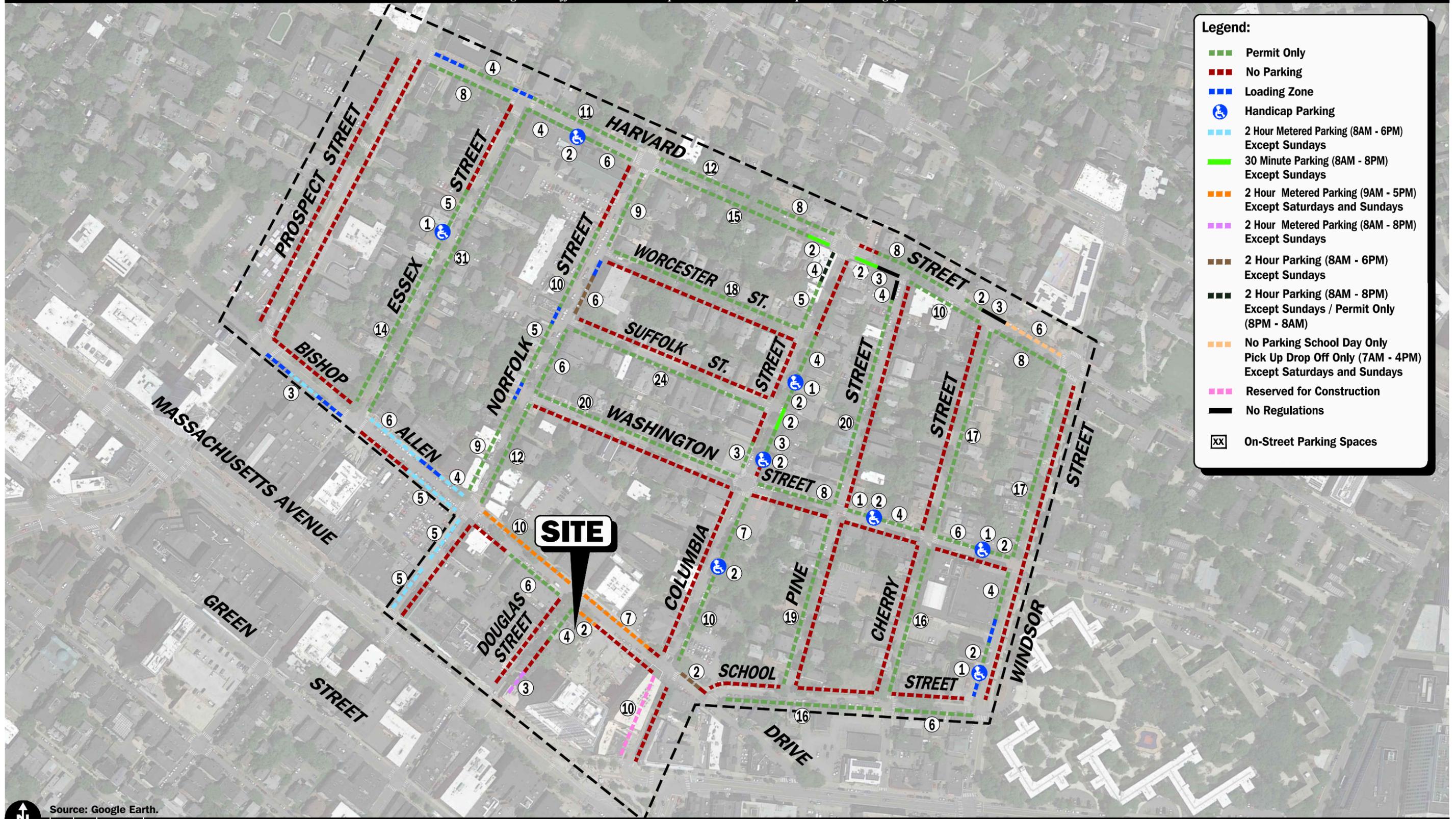
PARKING SUPPLY AND DEMAND ANALYSIS

A comprehensive field inventory of the existing parking supply of the Project was conducted in December 2019. Figure 1 depicts the study area. The field inventory consisted of on-street parking by quantity and type (handicapped, permit only, and regulations). In conducting the parking analysis, the study area was subdivided into eighteen (18) distinct parking zones in order to identify parking trends occurring within the study area. Figure 2 identifies the total parking supply in the area which totals 534 parking spaces. Figure 3 depicts the residential permit parking spaces and unregulated spaces which consists of 455 spaces. Figure 4 depicts the location of MBTA stations, MBTA bus stops, car-sharing locations, and BLUEbike stations in relations to the site. As can be seen from Figure 4, the nearest MBTA subway station, MBTA bus stop, and BLUEbike station are 0.2 miles from the site which equates to a 4 minute walk. The nearest car-sharing station is approximately 120 feet from the site which equates to a 1 minute walk.

In order to determine the availability of parking spaces, a parking demand survey was conducted during a typical weekday (December 10, 2019 to December 11, 2019). Parking observations were recorded at 12:00 Noon, 10:00 PM, and 6:00 AM. The parking observations identified the number of vacant spaces within the parking survey area. Table 1 and Figure 5 summarize the parking demand observations for the available resident parking.



Figure 1
Parking Study Area



Legend:

- Permit Only
- No Parking
- Loading Zone
- ♿ Handicap Parking
- 2 Hour Metered Parking (8AM - 6PM) Except Sundays
- 30 Minute Parking (8AM - 8PM) Except Sundays
- 2 Hour Metered Parking (9AM - 5PM) Except Saturdays and Sundays
- 2 Hour Metered Parking (8AM - 8PM) Except Sundays
- 2 Hour Parking (8AM - 6PM) Except Sundays
- 2 Hour Parking (8AM - 8PM) Except Sundays / Permit Only (8PM - 8AM)
- No Parking School Day Only Pick Up Drop Off Only (7AM - 4PM) Except Saturdays and Sundays
- Reserved for Construction
- No Regulations
- On-Street Parking Spaces

Figure 2
Existing Parking Supply

Source: Google Earth.
0 115 230 Scale in Feet



Legend:

- XX On-Street Parking Space
- XX Zone Designation

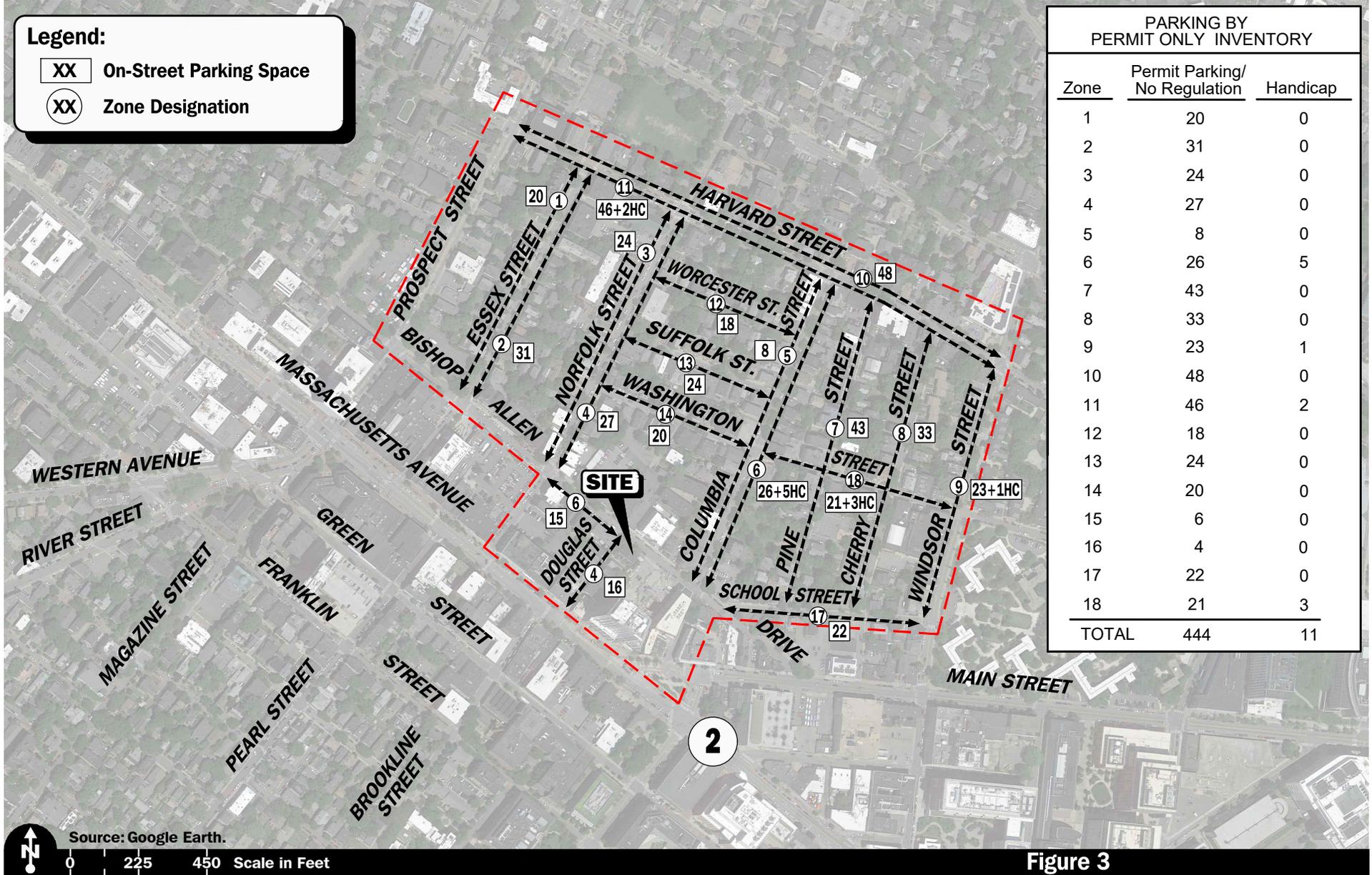


Figure 3
Parking Inventory

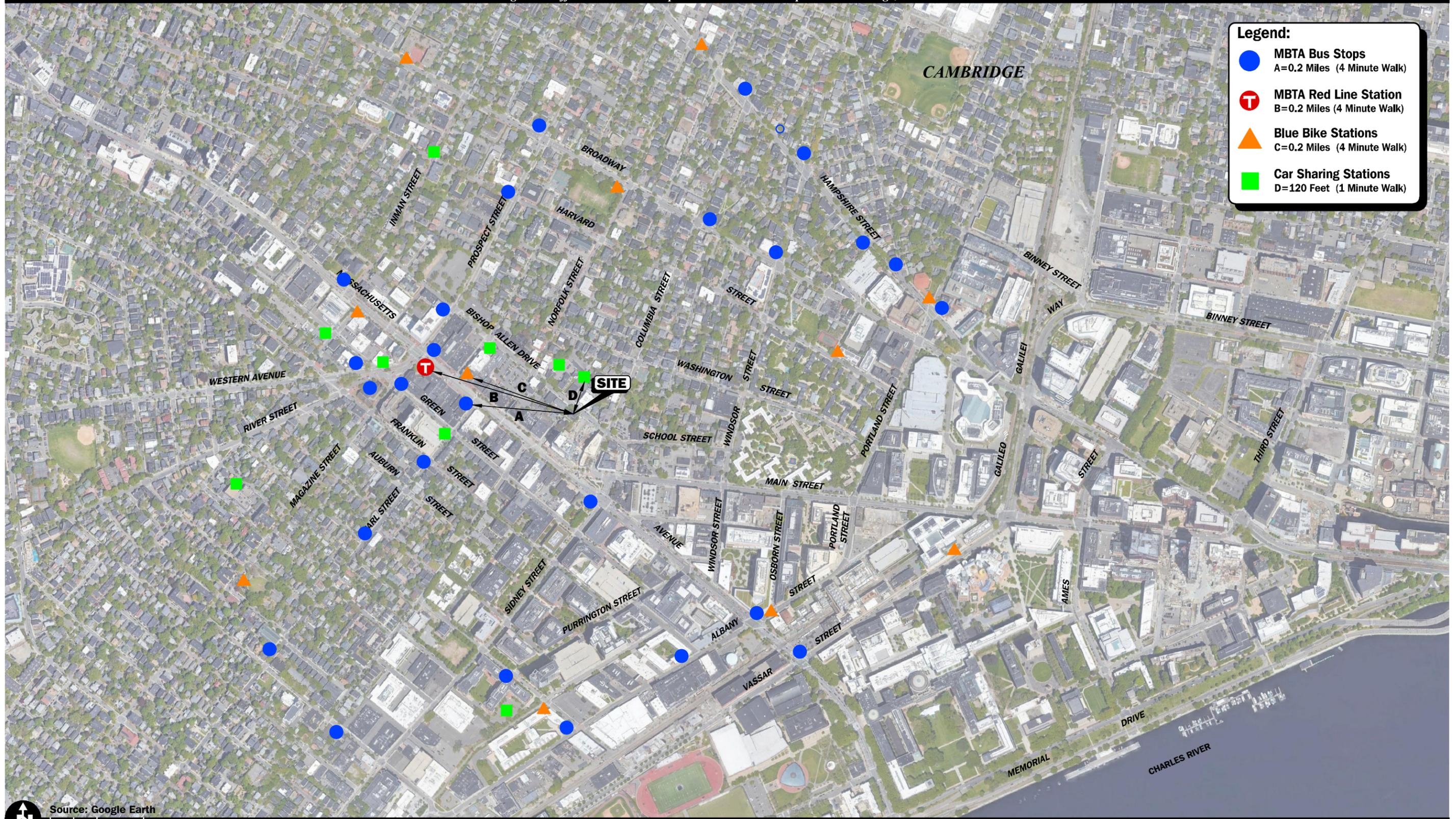


Figure 4
Alternative Transportation Services

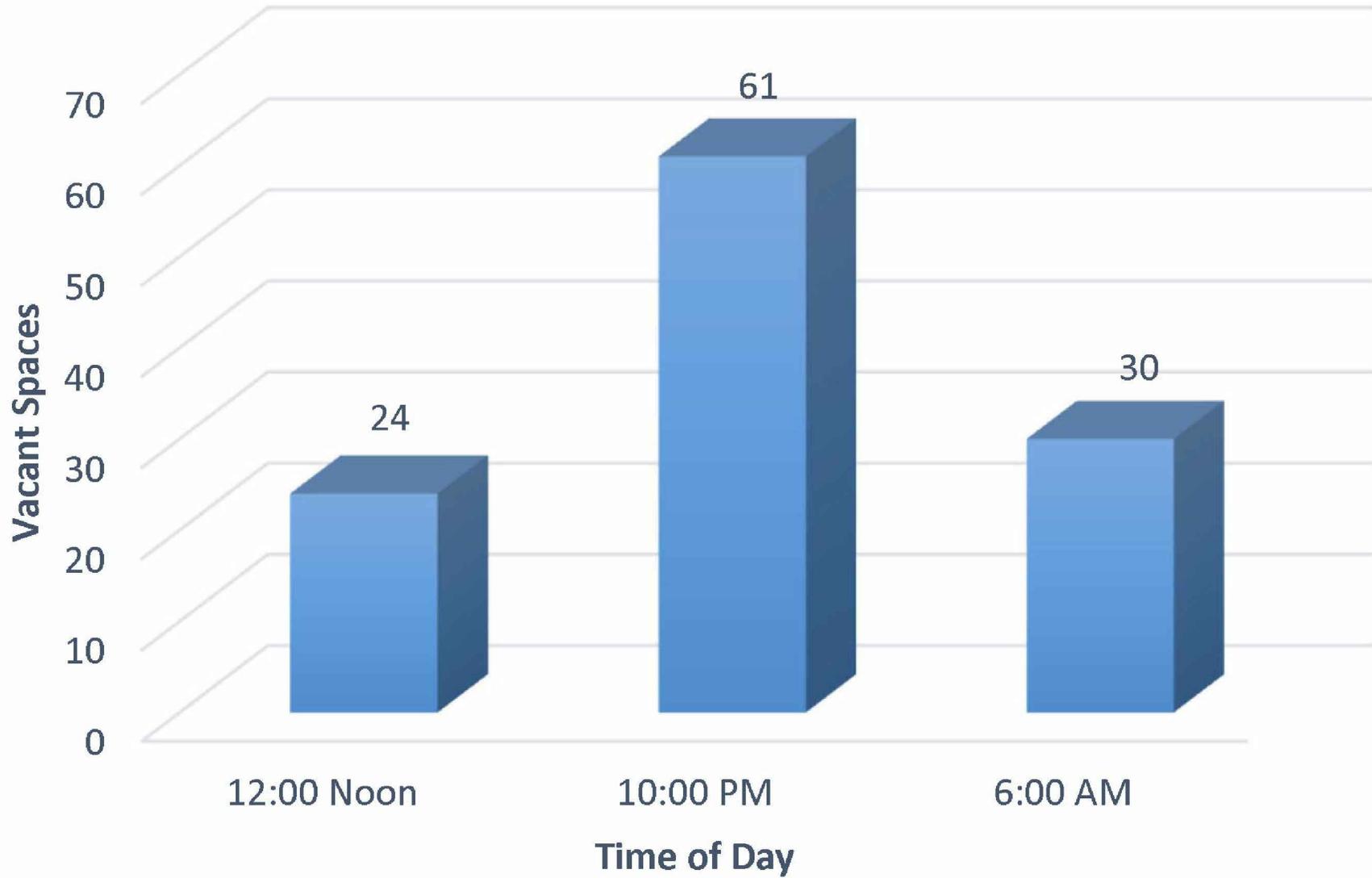


Figure 5

Parking Chart

Table 1
CAMBRIDGE PARKING DEMAND OBSERVATIONS
December 10, 2019 to December 11, 2019

Zone	Parking Supply	Vacant Spaces		
		6:00 AM	12:00 PM	10:00 PM
1	20	0	0	2
2	31	2	2	6
3	24	0	0	12
4	27	4	3	5
5	8	0	0	1
6	31	0	2	0
7	43	3	1	2
8	33	3	1	5
9	24	1	1	3
10	48	4	2	8
11	48	8	3	9
12	18	0	2	0
13	24	1	4	1
14	20	1	1	3
15	6	0	0	1
16	4	1	0	0
17	22	1	0	2
18	24	1	2	1
TOTAL	455	30	24	61

As shown in Table 1 and Figure 5 the peak hour demand occurs at 6:00 AM when 24 spaces were vacant.

The Project is proposing to only have on-street parking. By not providing parking, the Project impact will be minimized as auto ownership will be discouraged. Auto ownership is expected at 0.50 vehicles per unit and with 11 new units the new demand will be 6 spaces. Zoning requires one space per unit. Typical residential peak parking occurs after 10:00PM. Based upon the above, there is more than adequate on-street parking to accommodate the Project.

PROPOSED SITE TRIP GENERATION

Traffic volumes expected to be generated by the Project were determined by using the ITE *Trip Generation Manual*¹ Land Use Code (LUC) 221, Multifamily Housing (Mid-Rise). The existing building on-site contains 11 units and the Project entails constructing a new building containing 22 units. Therefore, the net increase in the number of units for the site is 11 which is what was used to determine the expected increase in site generated traffic. It is expected that a significant portion of the residents of the Project will utilize alternative modes of transportation other than automobiles. Based upon the U.S. Census the total

¹*Trip Generation Manual, 10th Edition*; Institute of Transportation Engineers; Washington, DC; 2017.

mode split of the Project is estimated as follows: 22 percent automobile trips; 36 percent transit; 32 percent pedestrian; 10 percent bicycle/other trips.

The Project trip generation by mode is summarized in Table 2.

**Table 2
PROJECT TRIP GENERATION SUMMARY**

Time Period/Direction	Person Trips – 11 Unit Increase						
	Vehicle Trips ^a (A)	Person Trips ^b (B = A*1.06)	Auto Trips ^c (C)	Transit Trips ^d (D)	Walk Trips ^e (E)	Bicycle/ Others Trips ^f (F)	New Vehicle Trips ^g (G=C/1.02)
<i>Average Weekday Daily:</i>	60	64	14	24	20	6	14
<i>Weekday Morning Peak Hour:</i>							
Entering							
Exiting	1	1	0	1	0	0	0
Total	<u>3</u>	<u>3</u>	<u>1</u>	<u>1</u>	<u>1</u>	<u>0</u>	<u>1</u>
	4	4	1	2	1	0	1
<i>Weekday Evening Peak Hour:</i>							
Entering							
Exiting	3	3	1	1	1	0	1
Total	<u>2</u>	<u>2</u>	<u>0</u>	<u>1</u>	<u>1</u>	<u>0</u>	<u>0</u>
	5	5	1	2	2	0	1

^aBased on ITE LUC 221 Multifamily Housing (Mid-Rise), for 11 units.

^bConverted to person trips using American Community Survey 2017 5-year estimates for U.S. – 1.06 persons per vehicle.

^c22 percent of total person trips

^d36 percent of total person trips.

^e32 percent of total person trips.

^f10 percent of total person trips.

^gConverted to vehicle trips using American Community Survey 2017 5-year estimates for U.S. Census Tract 3531.01. – 1.02 persons per vehicle.

As can be seen in Table 2, the Project is expected to generate approximately 14 new vehicle trips on an average weekday (7 entering/7 exiting), with approximately 1 new vehicle trips (0 entering/1 exiting) expected during the weekday morning peak-hour. During the weekday evening peak hour, the Project is expected to generate approximately 1 new vehicle trips (1 entering/0 exiting).

TRANSPORTATION DEMAND MANAGEMENT (TDM)

Reducing the amount of traffic generated by the Project is an important component of the development plan. The goal of the TDM plan is to reduce the use of Single Occupant Vehicles by encouraging car/vanpooling, bicycle commuting, the use of public transportation and pedestrian travel. The following measures will be implemented as a part of the proposed project management team in an effort to reduce the number of vehicle trips generated:

- In order to encourage the use of public transportation, the property management team will make available public transportation schedules, which will be posted in a centralized location for residents.

- In order to encourage car/vanpooling, the property management team will coordinate with MassRIDES and the Charles River Transportation Management Association (CRTMA) to identify car/vanpool resources that may be available to residents. This information will be posted in a centralized location.
- The property management team will investigate joining the CRTMA. The CRTMA could provide a ridematching program among the residents.
- The property management team will provide information on available pedestrian and bicycle facilities in the vicinity of the project site. This information will be posted in a centralized location.
- Bicycle racks will be provided on-site.
- Upon initial move-in and lease renewal, residents will be offered the choice of: (1) annual HUBWAY membership (including one-time discounted helmet through Hubway), (2) \$90 credit for ride share service; (3) 1-month adult MBTA Monthly LinkPass, and/or (4) 3-month Student or Senior Monthly LinkPass.

The above strategies will encourage non-auto travel by the residents.

SUMMARY

In summary, a detailed parking survey was completed in the area of the Project and based upon this data it can be concluded that there is more than sufficient availability of on-street parking to accommodate the Project. The Project proponent is committed to implementing a Travel Demand Management plan which promotes alternatives modes of transportation and will minimize the Project's impact on available on-street parking and traffic in the area.

APPENDIX

TRIP GENERATION CALCULATIONS

TRIP GENERATION CALCULATIONS

Institute of Transportation Engineers (ITE)
Trip Generation, 10th Edition
Land Use Code (LUC) 221 - Multifamily Housing (Mid-Rise)

Average Vehicle Trips Ends vs: Dwelling Units
Independent Variable (X): 11

AVERAGE WEEKDAY DAILY

$T = 5.44 * (X)$
 $T = 5.44 * 11$
 $T = 59.84$
 $T = 60.00$
 $T = 60$ vehicle trips
with 50% (30 vpd) entering and 50% (30 vpd) exiting.

WEEKDAY MORNING PEAK HOUR OF ADJACENT STREET TRAFFIC

$T = 0.36 * (X)$
 $T = 0.36 * 11$
 $T = 3.96$
 $T = 4$ vehicle trips
with 26% (1 vph) entering and 74% (3 vph) exiting.

WEEKDAY EVENING PEAK HOUR OF ADJACENT STREET TRAFFIC

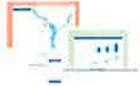
$T = 0.44 * (X)$
 $T = 0.44 * 11$
 $T = 4.84$
 $T = 5.00$
 $T = 5$ vehicle trips
with 61% (3 vph) entering and 39% (2 vph) exiting.

AVERAGE SATURDAY

$T = 4.91 * (X)$
 $T = 4.91 * 11$
 $T = 54.01$
 $T = 54.00$
 $T = 54$ vehicle trips
with 50% (27 vpd) entering and 50% (27 vpd) exiting.

SATURDAY MIDDAY PEAK HOUR OF GENERATOR

$T = 0.44 * (X)$
 $T = 0.44 * 11$
 $T = 4.84$
 $T = 5$ vehicle trips
with 49% (2 vph) entering and 51% (3 vph) exiting.



As of July 1, 2019 data.census.gov is now the primary way to access Census Bureau data, including the latest releases from the 2018 American Community Survey and 2017 Economic Census and the upcoming 2020 Census and more. American FactFinder will be decommissioned in 2020.

Read more about the [Census Bureau's transition to data.census.gov](#).

S0801

COMMUTING CHARACTERISTICS BY SEX
2013-2017 American Community Survey 5-Year Estimates

Although the American Community Survey (ACS) produces population, demographic and housing unit estimates, it is the Census Bureau's Population Estimates Program that produces and disseminates the official estimates of the population for the nation, states, counties, cities, and towns and estimates of housing units for states and counties.

Supporting documentation on code lists, subject definitions, data accuracy, and statistical testing can be found on the American Community Survey website in the [Technical Documentation](#) section.

Sample size and data quality measures (including coverage rates, allocation rates, and response rates) can be found on the American Community Survey website in the [Methodology](#) section.

Versions of this table are available for the following years:

2017
2016
2015
2014
2013
2012
2011
2010

1 57 of 57	Subject	Census Tract 3531.01, Middlesex County, Massachusetts					
		Total		Male		Female	
		Estimate	Margin of Error	Estimate	Margin of Error	Estimate	Margin of Error
	Workers 16 years and over	1,603	+/-216	847	+/-165	756	+/-184
	MEANS OF TRANSPORTATION TO WORK						
	Car, truck, or van	22.6%	+/-7.5	23.8%	+/-9.8	21.3%	+/-9.5
	Drove alone	22.0%	+/-7.5	23.8%	+/-9.8	20.0%	+/-9.1
	Carpooled	0.6%	+/-0.8	0.0%	+/-4.0	1.3%	+/-1.6
	In 2-person carpool	0.2%	+/-0.4	0.0%	+/-4.0	0.4%	+/-0.9
	In 3-person carpool	0.0%	+/-2.2	0.0%	+/-4.0	0.0%	+/-4.5
	In 4-or-more person carpool	0.4%	+/-0.7	0.0%	+/-4.0	0.9%	+/-1.4
	Workers per car, truck, or van	1.02	+/-0.03	1.01	+/-0.04	1.04	+/-0.08
	Public transportation (excluding taxicab)	35.6%	+/-6.6	26.3%	+/-8.6	45.9%	+/-10.1
	Walked	32.4%	+/-7.3	38.3%	+/-11.0	25.9%	+/-8.3
	Bicycle	6.7%	+/-3.4	8.5%	+/-4.8	4.6%	+/-4.0
	Taxicab, motorcycle, or other means	0.0%	+/-2.2	0.0%	+/-4.0	0.0%	+/-4.5
	Worked at home	2.7%	+/-2.1	3.1%	+/-3.1	2.2%	+/-2.9
	PLACE OF WORK						
	Worked in state of residence	99.6%	+/-0.6	99.3%	+/-1.1	100.0%	+/-4.5
	Worked in county of residence	66.0%	+/-6.5	66.1%	+/-7.9	65.9%	+/-10.5
	Worked outside county of residence	33.6%	+/-6.5	33.2%	+/-8.0	34.1%	+/-10.5
	Worked outside state of residence	0.4%	+/-0.6	0.7%	+/-1.1	0.0%	+/-4.5
	Living in a place	100.0%	+/-2.2	100.0%	+/-4.0	100.0%	+/-4.5
	Worked in place of residence	41.2%	+/-8.1	44.4%	+/-12.3	37.7%	+/-11.1
	Worked outside place of residence	58.8%	+/-8.1	55.6%	+/-12.3	62.3%	+/-11.1
	Not living in a place	0.0%	+/-2.2	0.0%	+/-4.0	0.0%	+/-4.5
	Living in 12 selected states	100.0%	+/-2.2	100.0%	+/-4.0	100.0%	+/-4.5
	Worked in minor civil division of residence	41.2%	+/-8.1	44.4%	+/-12.3	37.7%	+/-11.1
	Worked outside minor civil division of residence	58.8%	+/-8.1	55.6%	+/-12.3	62.3%	+/-11.1
	Not living in 12 selected states	0.0%	+/-2.2	0.0%	+/-4.0	0.0%	+/-4.5
	Workers 16 years and over who did not work at home	1,560	+/-217	821	+/-171	739	+/-181
	TIME LEAVING HOME TO GO TO WORK						
	12:00 a.m. to 4:59 a.m.	1.0%	+/-1.6	1.9%	+/-2.9	0.0%	+/-4.6
	5:00 a.m. to 5:29 a.m.	0.4%	+/-0.6	0.7%	+/-1.2	0.0%	+/-4.6
	5:30 a.m. to 5:59 a.m.	1.0%	+/-1.0	0.5%	+/-0.9	1.5%	+/-1.8
	6:00 a.m. to 6:29 a.m.	2.1%	+/-1.5	2.2%	+/-2.2	2.0%	+/-2.1
	6:30 a.m. to 6:59 a.m.	5.8%	+/-3.3	6.7%	+/-4.9	4.7%	+/-3.7
	7:00 a.m. to 7:29 a.m.	8.0%	+/-4.0	9.6%	+/-5.0	6.2%	+/-4.6
	7:30 a.m. to 7:59 a.m.	10.3%	+/-3.6	3.3%	+/-2.4	18.0%	+/-7.4
	8:00 a.m. to 8:29 a.m.	19.6%	+/-8.0	14.3%	+/-4.8	25.6%	+/-14.9
	8:30 a.m. to 8:59 a.m.	14.8%	+/-4.9	19.9%	+/-5.5	9.2%	+/-6.3
	9:00 a.m. to 11:59 p.m.	37.1%	+/-7.6	40.9%	+/-6.6	32.7%	+/-12.1
	TRAVEL TIME TO WORK						
	Less than 10 minutes	17.8%	+/-4.7	23.9%	+/-6.0	11.1%	+/-5.3
	10 to 14 minutes	16.4%	+/-4.9	16.9%	+/-6.2	15.8%	+/-8.6
	15 to 19 minutes	14.9%	+/-4.9	13.9%	+/-6.0	16.1%	+/-7.7
	20 to 24 minutes	8.3%	+/-3.5	7.1%	+/-4.3	9.6%	+/-6.5
	25 to 29 minutes	12.3%	+/-4.6	11.0%	+/-5.8	13.8%	+/-7.1
	30 to 34 minutes	13.5%	+/-4.7	13.0%	+/-6.1	14.1%	+/-6.9
	35 to 44 minutes	11.4%	+/-4.2	10.8%	+/-4.4	12.0%	+/-7.0
	45 to 59 minutes	1.9%	+/-1.3	1.5%	+/-1.5	2.4%	+/-2.1
	60 or more minutes	3.4%	+/-2.1	1.9%	+/-1.9	5.0%	+/-3.4
	Mean travel time to work (minutes)	21.3	+/-1.9	19.0	+/-1.9	23.8	+/-2.8
	VEHICLES AVAILABLE						

Subject	Census Tract 3531.01, Middlesex County, Massachusetts					
	Total		Male		Female	
	Estimate	Margin of Error	Estimate	Margin of Error	Estimate	Margin of Error
Workers 16 years and over in households	1,386	+/-204	748	+/-153	638	+/-165
No vehicle available	39.0%	+/-11.0	34.1%	+/-12.1	44.7%	+/-15.1
1 vehicle available	42.7%	+/-10.3	43.0%	+/-12.0	42.3%	+/-13.8
2 vehicles available	17.7%	+/-10.2	22.6%	+/-14.8	11.9%	+/-9.4
3 or more vehicles available	0.6%	+/-1.8	0.3%	+/-1.0	1.1%	+/-2.8
PERCENT ALLOCATED						
Means of transportation to work	29.7%	(X)	(X)	(X)	(X)	(X)
Private vehicle occupancy	41.3%	(X)	(X)	(X)	(X)	(X)
Place of work	33.6%	(X)	(X)	(X)	(X)	(X)
Time leaving home to go to work	41.3%	(X)	(X)	(X)	(X)	(X)
Travel time to work	41.0%	(X)	(X)	(X)	(X)	(X)
Vehicles available	2.7%	(X)	(X)	(X)	(X)	(X)

Source: U.S. Census Bureau, 2013-2017 American Community Survey 5-Year Estimates

Explanation of Symbols:

An "***" entry in the margin of error column indicates that either no sample observations or too few sample observations were available to compute a standard error and thus the margin of error. A statistical test is not appropriate.

An "-" entry in the estimate column indicates that either no sample observations or too few sample observations were available to compute an estimate, or a ratio of medians cannot be calculated because one or both of the median estimates falls in the lowest interval or upper interval of an open-ended distribution.

An "-" following a median estimate means the median falls in the lowest interval of an open-ended distribution.

An "+" following a median estimate means the median falls in the upper interval of an open-ended distribution.

An "***" entry in the margin of error column indicates that the median falls in the lowest interval or upper interval of an open-ended distribution. A statistical test is not appropriate.

An "*****" entry in the margin of error column indicates that the estimate is controlled. A statistical test for sampling variability is not appropriate.

An "N" entry in the estimate and margin of error columns indicates that data for this geographic area cannot be displayed because the number of sample cases is too small.

An "(X)" means that the estimate is not applicable or not available.

Data are based on a sample and are subject to sampling variability. The degree of uncertainty for an estimate arising from sampling variability is represented through the use of a margin of error. The value shown here is the 90 percent margin of error. The margin of error can be interpreted roughly as providing a 90 percent probability that the interval defined by the estimate minus the margin of error and the estimate plus the margin of error (the lower and upper confidence bounds) contains the true value. In addition to sampling variability, the ACS estimates are subject to nonsampling error (for a discussion of nonsampling variability, see Accuracy of the Data). The effect of nonsampling error is not represented in these tables.

The 12 selected states are Connecticut, Maine, Massachusetts, Michigan, Minnesota, New Hampshire, New Jersey, New York, Pennsylvania, Rhode Island, Vermont, and Wisconsin.

Workers include members of the Armed Forces and civilians who were at work last week.

When information is missing or inconsistent, the Census Bureau logically assigns an acceptable value using the response to a related question or questions. If a logical assignment is not possible, data are filled using a statistical process called allocation, which uses a similar individual or household to provide a donor value. The "Allocated" section is the number of respondents who received an allocated value for a particular subject.

While the 2013-2017 American Community Survey (ACS) data generally reflect the February 2013 Office of Management and Budget (OMB) definitions of metropolitan and micropolitan statistical areas; in certain instances the names, codes, and boundaries of the principal cities shown in ACS tables may differ from the OMB definitions due to differences in the effective dates of the geographic entities.

Estimates of urban and rural populations, housing units, and characteristics reflect boundaries of urban areas defined based on Census 2010 data. As a result, data for urban and rural areas from the ACS do not necessarily reflect the results of ongoing urbanization.



As of July 1, 2019 data.census.gov is now the primary way to access Census Bureau data, including the latest releases from the 2018 American Community Survey and 2017 Economic Census and the upcoming 2020 Census and more. American FactFinder will be decommissioned in 2020.

Read more about the [Census Bureau's transition to data.census.gov](#).

S0801 COMMUTING CHARACTERISTICS BY SEX
2013-2017 American Community Survey 5-Year Estimates

Although the American Community Survey (ACS) produces population, demographic and housing unit estimates, it is the Census Bureau's Population Estimates Program that produces and disseminates the official estimates of the population for the nation, states, counties, cities, and towns and estimates of housing units for states and counties.

Supporting documentation on code lists, subject definitions, data accuracy, and statistical testing can be found on the American Community Survey website in the [Technical Documentation](#) section.

Sample size and data quality measures (including coverage rates, allocation rates, and response rates) can be found on the American Community Survey website in the [Methodology](#) section.

Versions of this table are available for the following years:

- [2017](#)
- [2016](#)
- [2015](#)
- [2014](#)
- [2013](#)
- [2012](#)
- [2011](#)
- [2010](#)
- [2009](#)

1 57 of 57	Subject	United States					
		Total		Male		Female	
		Estimate	Margin of Error	Estimate	Margin of Error	Estimate	Margin of Error
	Workers 16 years and over	148,432,042	+/-153,416	78,647,149	+/-79,166	69,784,893	+/-81,719
	MEANS OF TRANSPORTATION TO WORK						
	Car, truck, or van	85.6%	+/-0.1	85.6%	+/-0.1	85.6%	+/-0.1
	Drove alone	76.4%	+/-0.1	76.4%	+/-0.1	76.5%	+/-0.1
	Carpooled	9.2%	+/-0.1	9.3%	+/-0.1	9.0%	+/-0.1
	In 2-person carpool	7.0%	+/-0.1	7.0%	+/-0.1	7.0%	+/-0.1
	In 3-person carpool	1.3%	+/-0.1	1.3%	+/-0.1	1.3%	+/-0.1
	In 4-or-more person carpool	0.9%	+/-0.1	1.0%	+/-0.1	0.8%	+/-0.1
	Workers per car, truck, or van	1.06	+/-0.01	1.06	+/-0.01	1.06	+/-0.01
	Public transportation (excluding taxicab)	5.1%	+/-0.1	4.8%	+/-0.1	5.4%	+/-0.1
	Walked	2.7%	+/-0.1	2.8%	+/-0.1	2.7%	+/-0.1
	Bicycle	0.6%	+/-0.1	0.8%	+/-0.1	0.3%	+/-0.1
	Taxicab, motorcycle, or other means	1.2%	+/-0.1	1.5%	+/-0.1	1.0%	+/-0.1
	Worked at home	4.7%	+/-0.1	4.5%	+/-0.1	5.0%	+/-0.1
	PLACE OF WORK						
	Worked in state of residence	96.3%	+/-0.1	95.6%	+/-0.1	97.0%	+/-0.1
	Worked in county of residence	72.4%	+/-0.1	70.0%	+/-0.1	75.1%	+/-0.1
	Worked outside county of residence	23.9%	+/-0.1	25.7%	+/-0.1	21.9%	+/-0.1
	Worked outside state of residence	3.7%	+/-0.1	4.4%	+/-0.1	3.0%	+/-0.1
	Living in a place	75.1%	+/-0.1	74.6%	+/-0.1	75.5%	+/-0.1
	Worked in place of residence	31.4%	+/-0.1	29.7%	+/-0.1	33.4%	+/-0.1
	Worked outside place of residence	43.6%	+/-0.1	45.0%	+/-0.1	42.1%	+/-0.1
	Not living in a place	24.9%	+/-0.1	25.4%	+/-0.1	24.5%	+/-0.1
	Living in 12 selected states	25.0%	+/-0.1	24.5%	+/-0.1	25.6%	+/-0.1
	Worked in minor civil division of residence	7.6%	+/-0.1	7.1%	+/-0.1	8.3%	+/-0.1
	Worked outside minor civil division of residence	17.4%	+/-0.1	17.4%	+/-0.1	17.3%	+/-0.1
	Not living in 12 selected states	75.0%	+/-0.1	75.5%	+/-0.1	74.4%	+/-0.1
	Workers 16 years and over who did not work at home	141,404,632	+/-164,332	75,118,548	+/-90,747	66,286,084	+/-81,356
	TIME LEAVING HOME TO GO TO WORK						
	12:00 a.m. to 4:59 a.m.	4.6%	+/-0.1	6.1%	+/-0.1	2.9%	+/-0.1
	5:00 a.m. to 5:29 a.m.	3.9%	+/-0.1	5.2%	+/-0.1	2.4%	+/-0.1
	5:30 a.m. to 5:59 a.m.	4.9%	+/-0.1	6.0%	+/-0.1	3.6%	+/-0.1
	6:00 a.m. to 6:29 a.m.	8.9%	+/-0.1	10.5%	+/-0.1	7.0%	+/-0.1
	6:30 a.m. to 6:59 a.m.	9.8%	+/-0.1	10.2%	+/-0.1	9.4%	+/-0.1
	7:00 a.m. to 7:29 a.m.	14.7%	+/-0.1	14.0%	+/-0.1	15.5%	+/-0.1
	7:30 a.m. to 7:59 a.m.	12.5%	+/-0.1	10.6%	+/-0.1	14.6%	+/-0.1
	8:00 a.m. to 8:29 a.m.	11.0%	+/-0.1	9.9%	+/-0.1	12.3%	+/-0.1
	8:30 a.m. to 8:59 a.m.	5.4%	+/-0.1	4.4%	+/-0.1	6.4%	+/-0.1
	9:00 a.m. to 11:59 p.m.	24.4%	+/-0.1	23.0%	+/-0.1	25.9%	+/-0.1
	TRAVEL TIME TO WORK						
	Less than 10 minutes	12.7%	+/-0.1	11.8%	+/-0.1	13.7%	+/-0.1
	10 to 14 minutes	13.6%	+/-0.1	12.7%	+/-0.1	14.6%	+/-0.1
	15 to 19 minutes	15.3%	+/-0.1	14.6%	+/-0.1	16.0%	+/-0.1
	20 to 24 minutes	14.6%	+/-0.1	14.3%	+/-0.1	14.9%	+/-0.1
	25 to 29 minutes	6.4%	+/-0.1	6.3%	+/-0.1	6.4%	+/-0.1
	30 to 34 minutes	13.7%	+/-0.1	14.2%	+/-0.1	13.1%	+/-0.1
	35 to 44 minutes	6.8%	+/-0.1	7.1%	+/-0.1	6.5%	+/-0.1
	45 to 59 minutes	8.1%	+/-0.1	8.7%	+/-0.1	7.5%	+/-0.1
	60 or more minutes	8.9%	+/-0.1	10.3%	+/-0.1	7.3%	+/-0.1
	Mean travel time to work (minutes)	26.4	+/-0.1	27.8	+/-0.1	24.7	+/-0.1
	VEHICLES AVAILABLE						

Subject	United States					
	Total		Male		Female	
	Estimate	Margin of Error	Estimate	Margin of Error	Estimate	Margin of Error
Workers 16 years and over in households	146,982,992	+/-156,459	77,847,868	+/-81,086	69,135,124	+/-83,114
No vehicle available	4.4%	+/-0.1	4.2%	+/-0.1	4.5%	+/-0.1
1 vehicle available	20.9%	+/-0.1	18.7%	+/-0.1	23.3%	+/-0.1
2 vehicles available	41.2%	+/-0.1	42.3%	+/-0.1	40.0%	+/-0.1
3 or more vehicles available	33.5%	+/-0.1	34.8%	+/-0.1	32.2%	+/-0.1
PERCENT ALLOCATED						
Means of transportation to work	9.4%	(X)	(X)	(X)	(X)	(X)
Private vehicle occupancy	10.6%	(X)	(X)	(X)	(X)	(X)
Place of work	12.6%	(X)	(X)	(X)	(X)	(X)
Time leaving home to go to work	19.5%	(X)	(X)	(X)	(X)	(X)
Travel time to work	14.1%	(X)	(X)	(X)	(X)	(X)
Vehicles available	1.2%	(X)	(X)	(X)	(X)	(X)

Source: U.S. Census Bureau, 2013-2017 American Community Survey 5-Year Estimates

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Estimates of urban and rural populations, housing units, and characteristics reflect boundaries of urban areas defined based on Census 2010 data. As a result, data for urban and rural areas from the ACS do not necessarily reflect the results of ongoing urbanization.

Project Address 50 Bishop Allen Drive	Special Permit Number PB -	Total Lot Area (SF) 5150
Applicant Name Stu-Lin Family Trust	Phone Number 617-491-1932	Open Space Requirement (%) 20%
Applicant Contact / Address 907 Massachusetts Avenue, Cambridge MA 02139	Email Address sdhope77@gmail.com	Includes High SRI Roof <input checked="" type="checkbox"/> Yes
Project Description Demolition of the existing structure and construction of a six story residential structure containing 22 dwelling units.		SRI Value 82
		Result Pass

Enter minimum required open space ratio. If the ratio is less than 20%, enter 20 here.
Low slope roofs (i.e. ≤ 2:12) must have a minimum SRI of 82. Steep slope roofs (i.e. > 2:12) must have a minimum SRI of 39.

		Outside 20' of PROW	Value Factor		Within 20' of PROW	Value Factor	Contributing Area	
Trees Enter the number of trees in each category. Count each tree only once on this form.	Preserved Existing Trees							
	A1	Understory tree currently <10' canopy spread	0	0.80	+	0	1.60	-
	A2	Understory tree currently >10' canopy spread	0	1.00	+	0	2.00	-
	A3	Canopy tree currently <15' canopy spread	0	0.80	+	0	1.60	-
	A4	Canopy tree currently between 15' and 25' canopy spread	0	1.00	+	0	2.00	-
	A5	Canopy tree currently >25' canopy spread	0	1.20	+	0	2.40	-
	New or Transplanted Trees							
A6	Understory tree	4	0.60	+	3	1.20	900	
A7	Canopy tree	0	0.70	+	0	1.40	-	
Planting Areas Enter area in square feet of each component in the box provided	B1	Lawn	0	0.30	+	0	0.60	-
	B2	Low Planting	160	0.40	+	112	0.80	154
	B3	Planting	74	0.50	+	226	1.00	263
Green Roofs & Facades For definitions, see reference document.	C1	Green Façade	0	0.10	+	0	0.20	-
	C2	Living Wall	0	0.30	+	0	0.60	-
	C3	Green Roof	0	0.30	+	0	0.60	-
	C4	Short Intensive Green Roof	0	0.50	+	0	1.00	-
	C5	Intensive Green Roof	0	0.60	+	0	1.20	-
Paving & Structures	D1	High-SRI Roof	Required	N/A				
	D2	High-SRI Paving	256	0.1				26
	D3	High-SRI Shade Structure	0	0.2	+	0	0.40	-
Project Summary	Portion of lot area utilizing green strategies		26%		Total Contributing Area		1,342	
	Portion of score from green strategies		98%		Total Area Goal		1,030	
	Portion of score from trees		67%		COOL FACTOR SCORE		1.30	
	Portion of score contributing to public realm cooling		64%					

When entering strategies that are within 20' of the public right of way (column L), do not also enter them in column

High-SRI roofs are a prerequisite of the Cool Factor and therefore are not assigned a point value.

If your project scores 1 or above, you have successfully met the requirements of the Cool